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Transportation Introduction

Bremerton is a city rich in history and beauty. Over the past century, Bremerton has continued to grow into an attractive waterfront community on the shores of Puget Sound. This Transportation Appendix aims to provide a 20-year vision for Bremerton's transportation system, which respects the community's history and character, supports anticipated growth in the region, and builds on Bremerton's momentum as an attractive community in which to live, work, and play by supporting safe and comfortable travel by all modes through 2036.

The overall vision for Bremerton's Transportation Plan is to promote, manage, and maintain a safe, efficient, and integrated multimodal transportation system that is consistent with the City's overall vision and adequately serves anticipated growth. Guidance from City staff, the Planning Commission, stakeholders, and citizens helped identify several priorities:

- Create an interconnected multimodal network that connects all users to City Centers and major destinations within Bremerton as well as Kitsap County
- Improve safety for all users through updated facilities and street designs that accommodate all modes
- Coordinate with local and regional partners to ensure that travel patterns do not disproportionately impact Bremerton residents' quality of life
- Increase transportation spending on maintaining, preserving, and operating the existing transportation system

The Transportation Plan sets a framework for understanding, prioritizing, measuring, and creating a transportation network to help Bremerton achieve its vision. This document includes five sections:

- **Section 1 – Conditions and Trends:** Describes conditions for all travel modes in the existing transportation system. This section also identifies current challenges and trends that will affect Bremerton's transportation network in the future.
- **Section 2 – Community Outreach:** Describes the public outreach process conducted with community stakeholders and members, as well as specific feedback received from community members.
- **Section 3 – Future Transportation Vision:** Introduces a layered network concept that forms the foundation of this plan to accommodate all modes of travel and create a complete transportation network in Bremerton. This section also details how to accommodate each travel mode and establishes the City's level of service standards.
- **Section 4 – Transportation Projects:** Provides a long-term capital plan based on the community values expressed in the transportation goals and layered network.
- **Section 5 – Implementing the Transportation Plan:** Evaluates Bremerton's financial conditions over the next 20 years and provides guidance on plan implementation.

To serve as a useful document for the community, including both City staff and the public, this Transportation Appendix focuses on the City's vision and the projects and programs intended to meet that vision.

Conditions and Trends

This section describes how people use Bremerton's transportation network today, as well as how that may change over the next 20 years as the region grows. The way people travel is greatly influenced by the built environment, which includes land use and travel corridors; it also includes the key destinations people travel to, such as where they live, work, play, shop, and recreate, and an understanding of how people are traveling based on anticipated travel growth and travel mode data.

Land Uses and Key Destinations

The places where people live, work, and play are impacted by how a city and surrounding communities guide where development occurs. The Land Use Chapter of the Comprehensive Plan provides the guidance mentioned here. One way a city can influence this is through zoning. Zoning allows a city to encourage specific development, such as homes and businesses, to occur in targeted areas of the city. It is important to consider land use when planning for transportation because it provides insight into areas where more people may concentrate their travel.

The City of Bremerton also endorses the "Centers Concept", which is described in detail in the Land Use Chapter of this Plan. In general, a Center is a mixed-use area. It places residences, basic services for residents, employment opportunities, and amenities such as public spaces and parks, in a well-designed area. Centers plan for growth in the most efficient manner possible. Centers also support easier access to jobs and transportation, urban amenities, and a pedestrian-friendly environment with walking access to basic services.

The commercial areas in Bremerton, where people commonly shop, are located downtown, within the East Bremerton area, and west of SR 3; these areas are zoned for commercial and residential uses and can be seen in the Land Use Chapter.

Downtown and East Bremerton are linked by the Manette Bridge, with properties within these areas zoned by the Downtown Regional Center and Manette Neighborhood Center. The intent of centers is to focus commercial, entertainment, cultural, civic uses, and urban residential into an active compact, walkable area served by public transit.

Other areas of commercial and industrial land use are located in the western portions of the City along Burwell Street, 6th Avenue, and Kitsap Way. Much of the remaining City area is zoned for single-family residential, multi-family residential, institutions, and the military. Parking is also a major land use in Bremerton[1].

Key destinations, areas of the City where people typically concentrate their travel to and from, and the Bremerton Centers are summarized in **Figure 1**.

[1] PSRC. 2013. "Regional Centers Monitoring Report" http://www.psrc.org/assets/268/rgc-profile-Bremerton.pdf

Downtown Bremerton

Downtown Bremerton, located on Washington Avenue next to the Ferry Terminal, is a major trip generator in Bremerton. Within the district locals and visitors alike, explore public parks, fountains and art along Bremerton's waterfront, while enjoying the district's restaurants, museums, shops and tourist attractions. The downtown area also features community events such as the Bremerton Farmer's Market at Evergreen Rotary Park.

Kitsap Conference Center

Just a short ferry ride from Seattle, the Kitsap Conference Center provides a 15,000 square foot venue for meetings, conferences, trade shows, social events, reunions, and weddings along one of Bremerton's prime waterfront locations. Over the years, countless conferences and events have been located at this waterfront location drawing visitors from the region and nation.

Bremerton Transportation Center & Ferry Terminal

Located in downtown, the Bremerton Transportation Center and Ferry Terminal provide connections to key local and regional destinations. Seven Kitsap Transit bus routes and one Mason Transit bus route serve the Transportation Center. The Ferry Terminal is served by the Washington State Ferries, with connections to Seattle, and Kitsap Transit, with passenger only connections to Port Orchard and Annapolis. Both The Bremerton Transportation Center and Ferry Terminal create high levels of multimodal activity, especially during peak commute travel times.

Schools

The Bremerton School District operates neighborhood schools that serve approximately 5,000 students within the City and surrounding areas[2]. The District consists of:

- Crownhill Elementary
- Armin Jahr Elementary
- Kitsap Lake Elementary
- View Ridge Elementary
- Naval Avenue Early Learning Center
- West Hills Stem Academy
- Mountain View Middle School
- Bremerton High School
- Renaissance High School

The City of Bremerton, the Bremerton School District, and neighborhood groups, have made a commitment to provide safe access to the City's schools by establishing a State Safe Routes to School (SRTS) program. Currently, the Bremerton School District has an established set of safe walking routes for Armin Jahr Elementary School, Crownhill Elementary School, Kitsap Lake Elementary School, Naval Avenue Elementary School, and West Hills Elementary School.

[2] Bremerton School District. 2015. "About our District" http://www.bremertonschools.org/domain/51

Olympic College

Olympic College is a major destination in central Bremerton, and is home to approximately 8,000 students[3]. In general, the pedestrian network surrounding the college is well connected by streets to the south and east side of campus, however the streets to the west are less connected and lack sidewalks in many locations.

Warren Avenue serves as a major barrier between the college and residential neighborhoods, restricting walking and biking opportunities. The lack of facilities on the Warren Avenue bridge further inhibit walking and biking to the campus. Currently, there are no bike lanes on the bridge, and sidewalks are less than four feet making it difficult for pedestrians to use the facility. As a result, access to the college is primarily by car, using Warren Avenue between 13th Street and 16th Street or by Kitsap Transit Bus Route 24.

Parks and Recreation Areas

The City's park system consists of one regional park, three community parks, nine neighborhood parks, 10 pocket parks, four natural areas, six plazas, and five special use facilities. The City's parks and recreation areas feature ball fields, playgrounds, walking paths, water access, picnic areas, scenic views, a skate park, and a dog park.

In addition to schools and parks, the Bremerton Senior Center and various retirement communities throughout the area are major generators of non-motorized trips. Many residents of retirement communities no longer drive their own vehicles, so they are dependent on privately operated shuttles, public transportation, and walking to get to doctors' appointments, residences of friends, and shopping/dining destinations. There are approximately 10 major retirement communities in Bremerton, located in a north-south corridor roughly centered on SR 303.

[3] Olympic College. 2015. "2014-2015 Facts and Figures" http://www.olympic.edu/about-oc/2014-2015-facts-and-figures

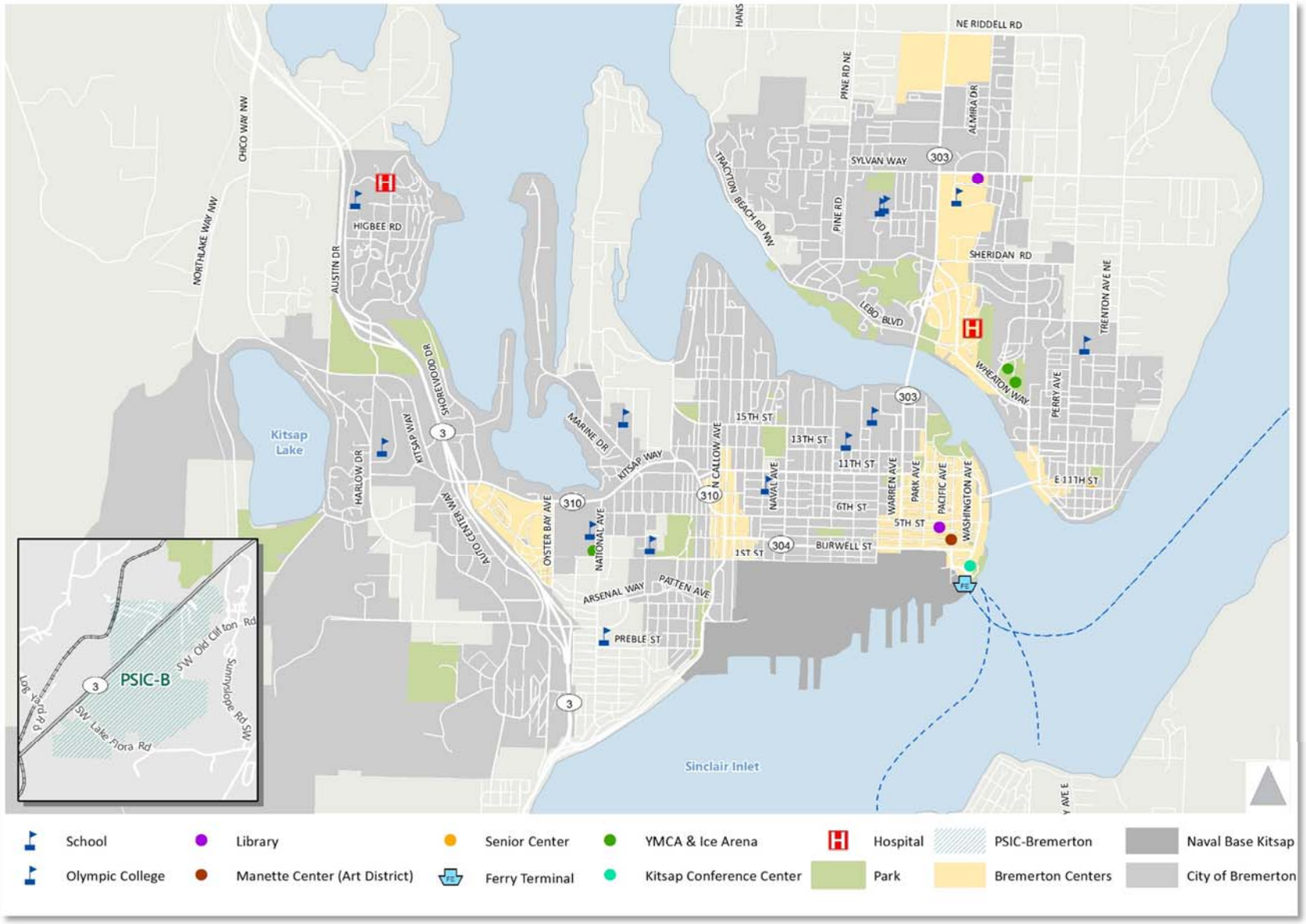
Naval Base Kitsap

Naval Base Kitsap (NBK-Bremerton) is located on the north side of the Sinclair Inlet within the incorporated boundaries of the City of Bremerton. It hosts the Puget Sound Naval Shipyard and Intermediate Maintenance Facility which is Washington State's second largest industrial employer. Almost half of Bremerton's jobs are associated with the Naval Shipyard, Naval Hospital and Fleet Logistics Center. NBK-Bremerton employers create a high level of multimodal transportation demand. Currently, heavy congestion exists on corridors leading to NBK-Bremerton during the weekday morning and afternoon peak hours, especially along Burwell Street. In the future, Commands located on Naval Base Kitsap-Bremerton are expected to see increased employment, which will further stress the transportation system surrounding the base.

Puget Sound Industrial Center (PSIC-Bremerton)

PSIC-Bremerton, formally known as South Kitsap Industrial Area (SKIA), is a key regional growth center and destination. It contains a mix of industrial and commercial businesses, including the Bremerton National Airport and the Olympic View Industrial Park. The roadway network within and surrounding PSIC-Bremerton consists of SR 3 (a principal north/south roadway on the Kitsap Peninsula), SR 16 (a major freeway that connects Bremerton with Tacoma), and several two-lane county roads. Currently, transit, bicycle, and pedestrian systems are limited within PSIC-Bremerton.

Figure 1: Key Destinations



Transportation Network

Bremerton's transportation network accommodates many modes of travel, including walking, bicycling, public transit, and driving. Vehicular travel is still the primary choice for most travelers in and around Bremerton, as shown in the American Community Survey data in **Figure 2**. The City has made significant investments in creating a walkable downtown. Nevertheless, city streets form the foundation of the transportation framework with roadways shaping how residents and visitors experience Bremerton.

The main travel corridors in Bremerton are mostly roadways with sidewalks, but also include some trails and bus routes. The downtown portion of Bremerton, roughly between Washington Avenue and Warren Avenue along 1st through 6th Streets has a relatively well-connected street grid. The northern and western portions of the city are characterized by larger blocks and curvilinear streets, which can make direct connections more difficult.

This plan classifies Bremerton's roadways into major arterials, minor arterials, collectors, and local streets, as shown in **Table 1** and displayed in **Figure 3.** Classifications for Washington State are defined and approved by the Federal Highway Administration (FHWA). There have been no changes in the roadway classifications since the previous plan, however changes to Bremerton's functional classification are being considered as part of this update.

Figure 2: Commute Mode to Work in Bremerton

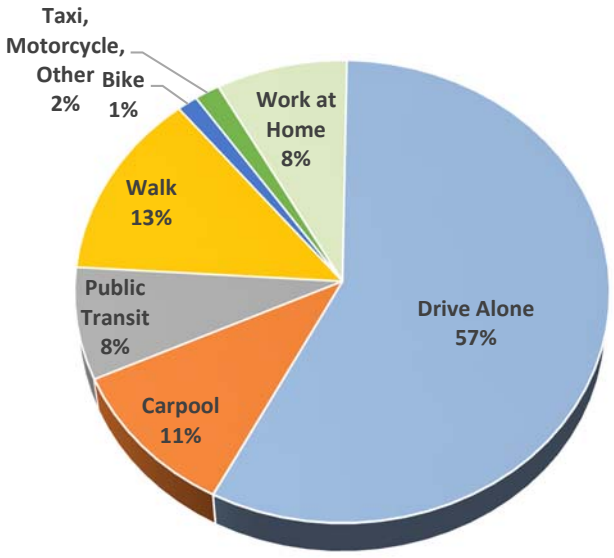
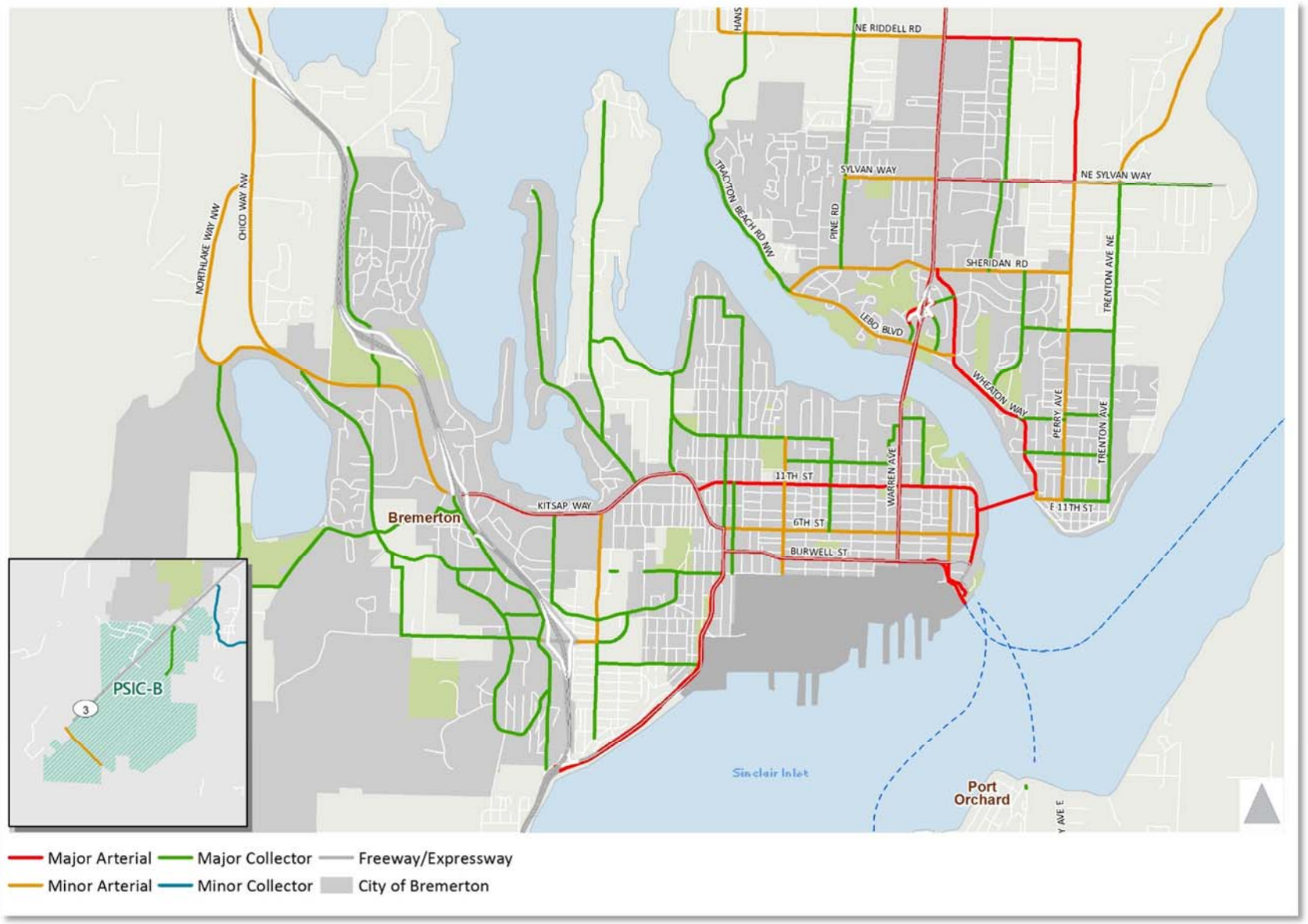


Table 1: Roadway Classifications

ROADWAY TYPE	DESCRIPTION / PURPOSE	EXAMPLE	
Principal Arterial	Principal arterials serve regional through trips and connect Bremerton with the rest of the region. These facilities are the focus of using technology to enhance and preserve capacity for moving vehicles and freight. Increasingly, principal arterials are used by pedestrians due to the direct connections they provide. However, in Bremerton, pedestrian facilities on principal arterials are generally outdated.	**Burwell Street** 11th Street	
Minor Arterial	Minor arterials are designed for higher volumes, but tend not to be major regional travel ways. Minor arterial streets provide inter-neighborhood connections. Similarly, technology to enhance and preserve capacity are a focus. These corridors could be the focus of targeted bicycle and pedestrian improvements.	**Naval Avenue** 6th Street	
Collectors	Major Collectors distribute trips between local streets and arterials and serve as transition roadways to or from commercial and residential areas. These are streets should be designed to maintain vehicular mobility at lower speeds to improve safety for motorists, bicyclists, and pedestrians.	**High Avenue** Park Avenue	
Local Streets	These streets also distribute trips between local streets and arterials and serve as transition roadways to or from commercial and residential areas. Minor Collectors have low volumes and can include select traffic calming elements to balance experience for all modes, while also providing vehicular mobility.	**Pleasant Avenue** Marion Avenue	

Figure 3: Roadway Classifications



Existing Pedestrian Facilities

Residents and visitors in Bremerton walk as a part of their daily travel for many reasons. Children attending school, commuters taking the bus or connecting with a carpool to get to work, senior citizens making midday trips, or residents walking their pets all require safe pedestrian amenities. Sidewalks, crosswalks, and curb ramps are all key features in creating a safe and welcoming environment for people to walk. Buffers between sidewalks and lanes of traffic, such as landscaping or on-street parking, can also provide some relief from traffic for pedestrians.

Figure 4 shows examples of Bremerton's existing pedestrian sidewalks and amenities.

The presence and conditions of sidewalks vary considerably throughout Bremerton. Sidewalks are generally available along all arterials, streets within the central business district, and in newer subdivisions. However, many older parts of the community and recently annexed areas have incomplete or older sidewalks. Sidewalk coverage and quality is also inconsistent near high priority pedestrian areas such as schools and major employers, which create challenges for children walking to school and residents commuting to work by foot or transit.

In addition, critical links such as the Warren Avenue Bridge, are in need of sidewalk and ADA improvements. Without improved sidewalk conditions on the Warren Avenue Bridge it is difficult for residents to connect to key destinations such as Olympic College and East Bremerton healthcare facilities. Currently, both sidewalks along the bridge are less than four feet wide and create major challenges for pedestrians in wheelchairs, pedestrians pushing strollers, and other users to pass each other within the sidewalk. In addition, there are currently no bike facilities on the bridge making it difficult for bicyclists to use the roadway, as vehicle travel typically exceeds speeds of 45 mph. Retrofitting and developing missing links in Bremerton's sidewalk network will promote a more walkable environment in Bremerton and contribute to more trips made by walking.

The ability of facilities to meet Americans with Disabilities Act (ADA) requirements is important to the City. The City is undertaking an inventory of existing barriers to ADA mobility and access, which will be used as part of the ADA Transition Plan.

Figure 4: Examples of Existing Pedestrian Facilities

Existing Bicycle Facilities

Bicycle facilities are an important element in the transportation network. Currently, bicycle facilities are limited to shared lane use markings and bicycle lanes on Kitsap Way, Wheaton Way, Charleston Boulevard, and Auto Center Way, as well as shared use paths and trails within city parks. Existing gaps in the bicycle network create "high stress" environments in which bicyclists must navigate through vehicle traffic or difficult arterial crossings to complete their journey.

Figure 5 shows examples of Bremerton's bicycle facilities including newly constructed bike lanes on Lower Wheaton Way (top) and share the road signage on Tracyton Beach Road (bottom).

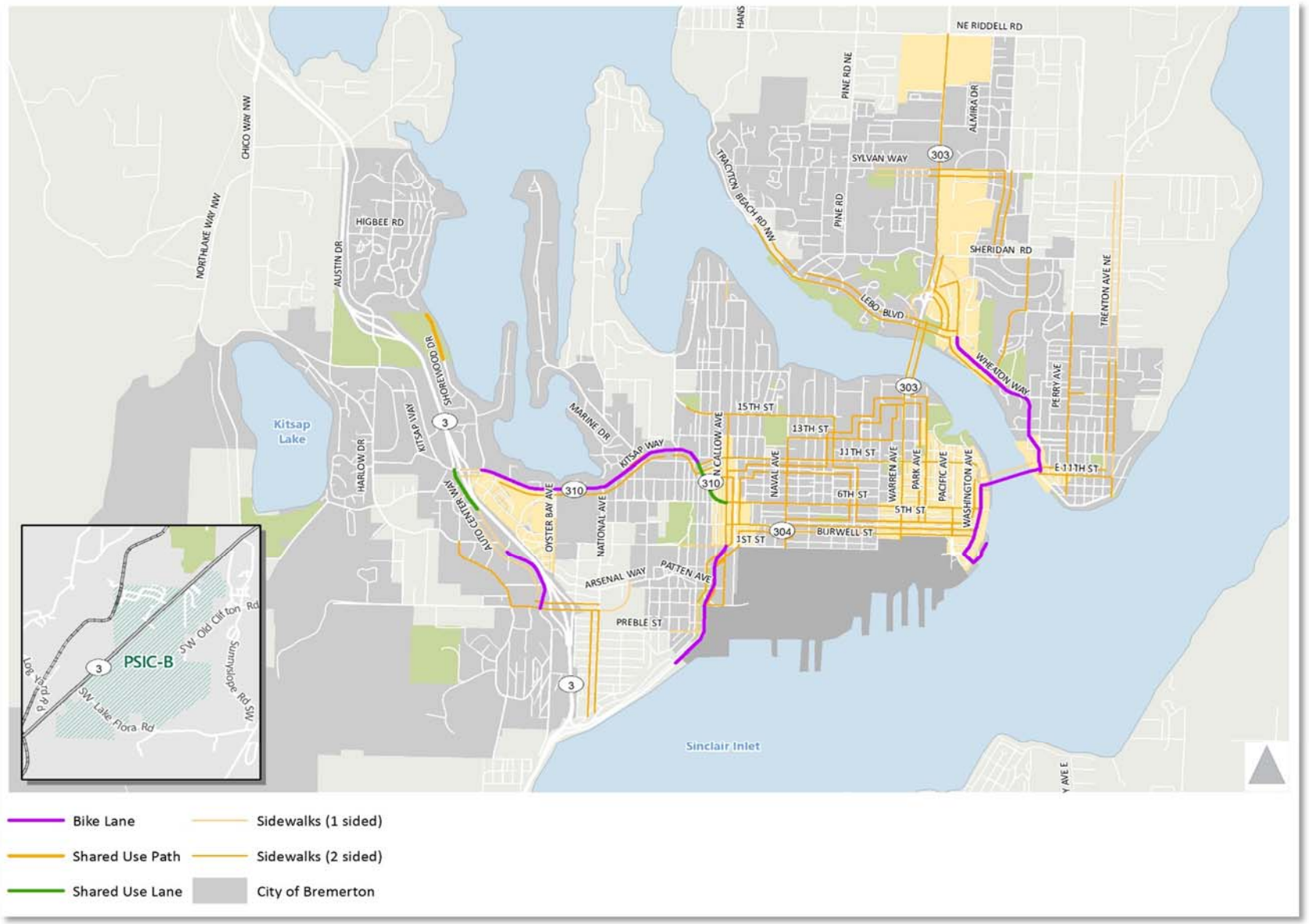
Bremerton is actively working to improve conditions for bicyclists. The City recently completed several bicycle projects including the installation of sharrows on Kitsap Way between Callow Avenue and SR 3, bicycle lanes on Wheaton Way between the Manette Bridge and Lebo Boulevard, traffic calming enhancements along Washington Avenue, and bicycle lanes on Pacific Avenue between 5th Street and the Manette Bridge.

The community has identified a need for an interconnected bicycle network with well-defined east-west and north-south bicycle routes as a major priority. Without adequate bicycle facilities, residents and commuters face challenges navigating the City's street network.

Figure 6 shows existing bicycle and pedestrian facilities within Bremerton.

Figure 5: Examples of Existing Bicycle Facilities

Figure 6: Existing Bicycle and Pedestrian Facilities



Kayaking

Waterfront communities, such as Bremerton, have a unique opportunity to provide a variety of water based transportation options. Although predominantly used for recreation, water trails are a viable transportation option to commute to work and other key destinations.

The Kitsap Peninsula has more than 300 miles of shoreline, making it the second longest coastline in Washington State. The peninsula is spanned by the Kitsap Peninsula Water Trail, as well as the National Water Trails System and the Washington Water Trails Cascadia Marine Trail, which reaches from Olympia to the Canadian Border. The peninsula connects to many kayak launch points, and has the potential to link to pedestrian and land based transit systems throughout Bremerton and surrounding areas.

Figure 7 shows a map of existing water trails in the Kitsap Peninsula.

Figure 7: Kitsap Peninsula Water Trails Map

Public Transit

Public transit serves as a key component of the transportation network that connects residents with employment centers, public places and regional destinations. Many Bremerton residents and employees use public transit for trips within and outside of the City. Public transit in Bremerton consists of fixed-route bus and ferry service provided by Kitsap Transit, Mason Transit, and Washington State Ferries.

Figure 8 on the following page highlights the route coverage of fixed-route bus and ferry service in Bremerton.

Kitsap Transit provides local, limited, and shuttle bus transit service. The majority of transit riders access Kitsap Transit service by walking to transit from their home or by driving to a parking lot or on-street parking and then walking to connect to transit. Fourteen bus routes serve Bremerton with frequencies ranging from 20 to 60 minutes.

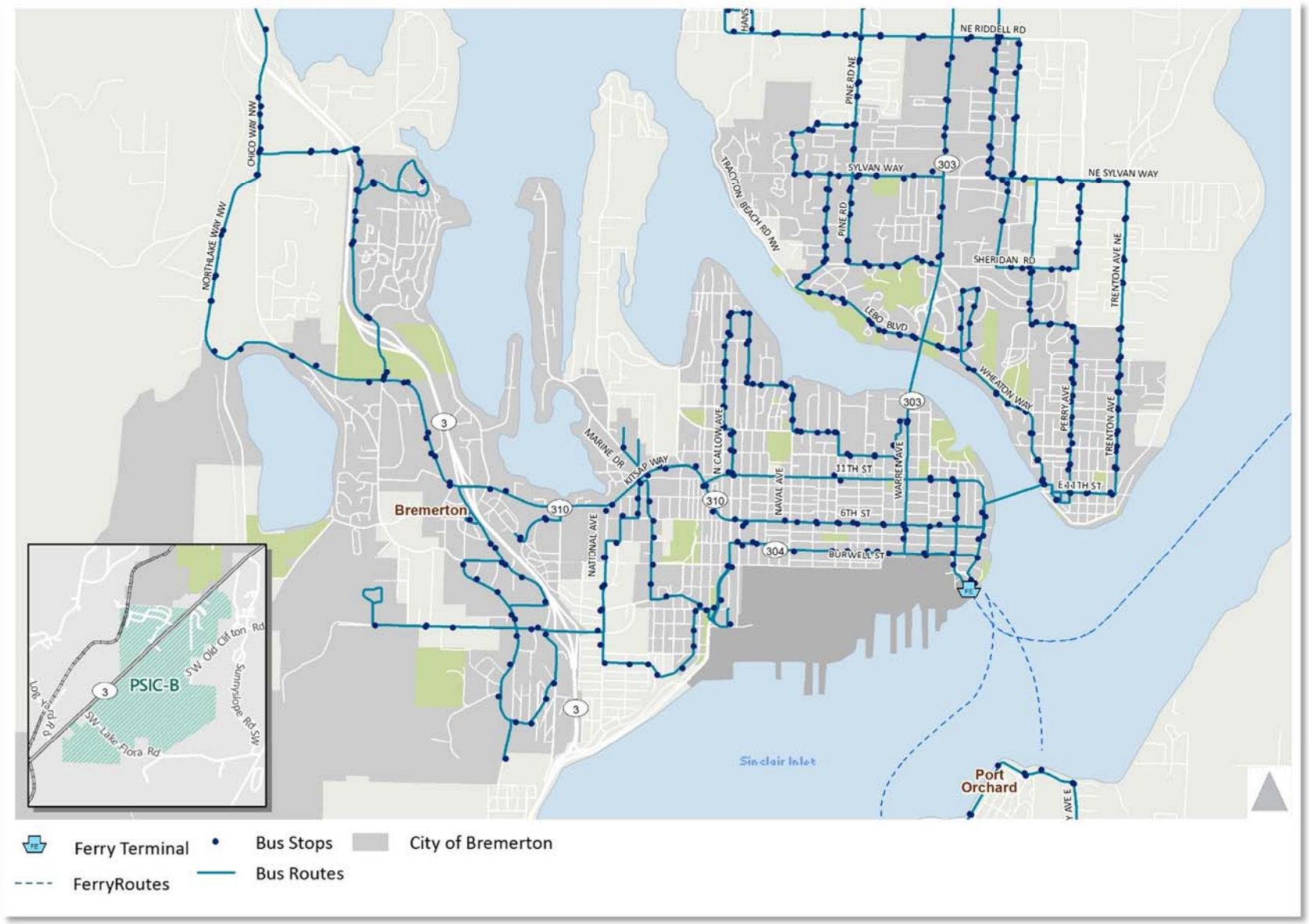
The Bremerton Transportation Center provides access to seven of the local bus routes. Additionally, Mason Transit operates one bus route from the Bremerton Transportation Center to the City of Belfair. Currently, no Kitsap Transit routes serve PSIC-Bremerton.

Kitsap Transit, Mason Transit, and the Washington State Ferries serve the Bremerton Ferry Terminal. Kitsap Transit provides passenger ferry service to Port Orchard and Annapolis, every half-hour, six days a week. In 2013, foot ferry ridership accounted for 450,732 of Kitsap Transit's total boardings[4].

The Washington State Ferries provides passenger and vehicular ferry service to Bremerton via the Bremerton-Seattle ferry, between 5 am to midnight. There are 15 daily ferries to Bremerton, departing every 60 to 120 minutes. Between 2013 and 2014, ridership between Bremerton and Seattle grew by approximately 10 percent, serving over 2.5 million passengers.

[4] http://www.kitsaptransit.com/uploads/pdf/board/annualreport2013.pdf

Figure 8: Existing Transit Service



Active Transportation Analysis

Active transportation is any human-powered mode of transportation, such as walking and biking. **Figure 9** displays areas that are attractive for active transportation in Bremerton. A description of the active transportation analysis process is provided below.

- **Tool.** To forecast areas that have higher levels of active transportation, several indices of walking and bicycling demand were evaluated. Each index was chosen based on its relationship between the built environment and travel patterns. A composite score was then calculated to determine the relative attractiveness of one area over another for active transportation.

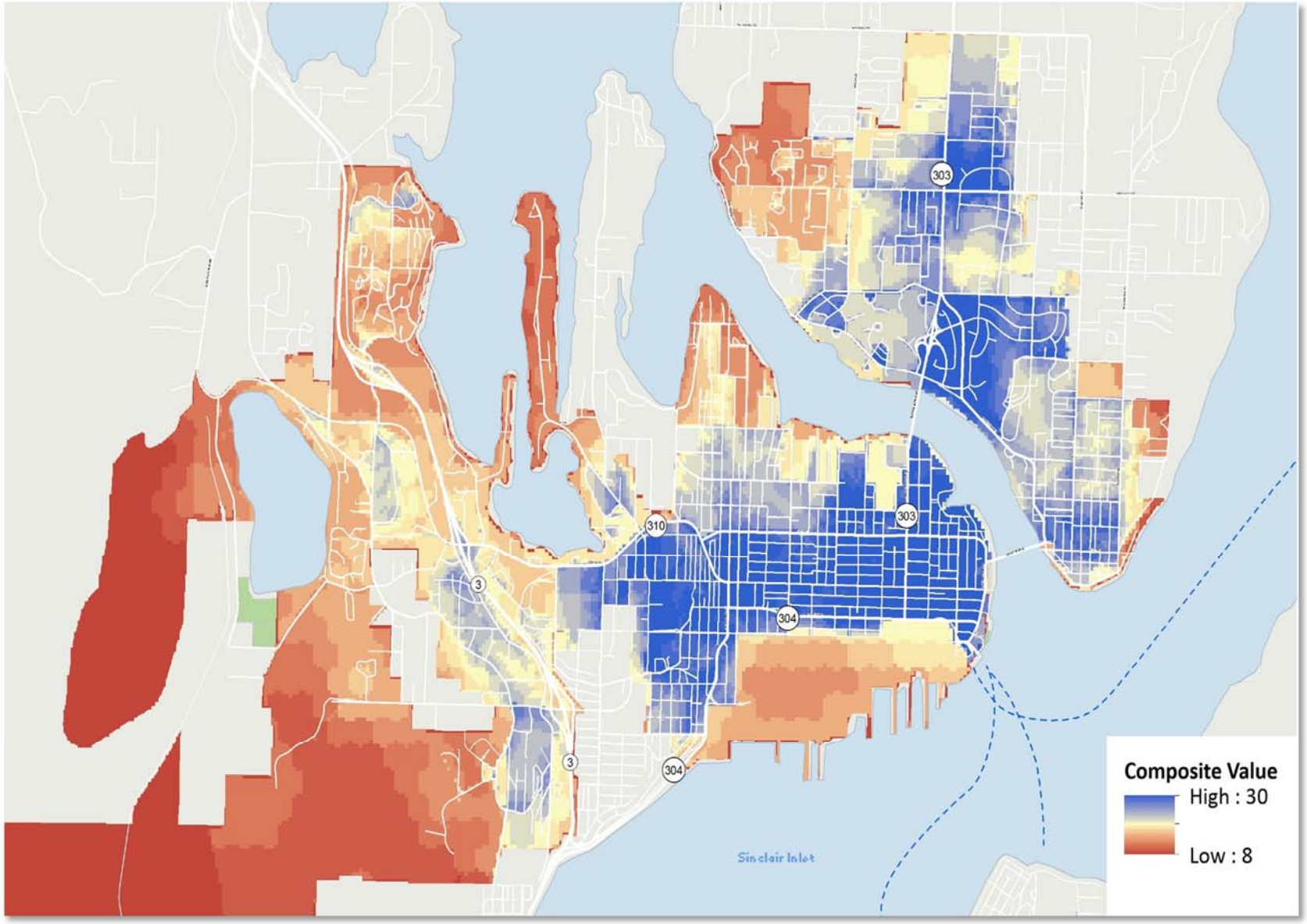
- **Estimating Active Transportation.** To estimate walking and biking demand in Bremerton, eight indices were evaluated:

  - Proximity to attractions
  - Proximity to schools
  - Proximity to parks
  - Proximity to transit
  - Population density
  - Employment density
  - Diversity of land use
  - Age (8-80)

- Each index was weighted based on the strength of its relationship with walking and biking, and measured at the census block level using spatial analysis software. Each census block was then assigned a composite score based on how accessible or attractive it was for walking and biking.

- **Analyzing the Results**. Bremerton's walking and bicycling results indicate that many streets near Downtown Bremerton are especially attractive for walking and biking uses. Vital streets that serve as a link to a variety of uses and destinations scored highly, including Burwell Street, 6th Street, and Warren Avenue. This plan uses these findings as a resource to evaluate bicycle and pedestrian improvements along desire corridors.

Figure 9: Active Transportation



Freight and Aviation

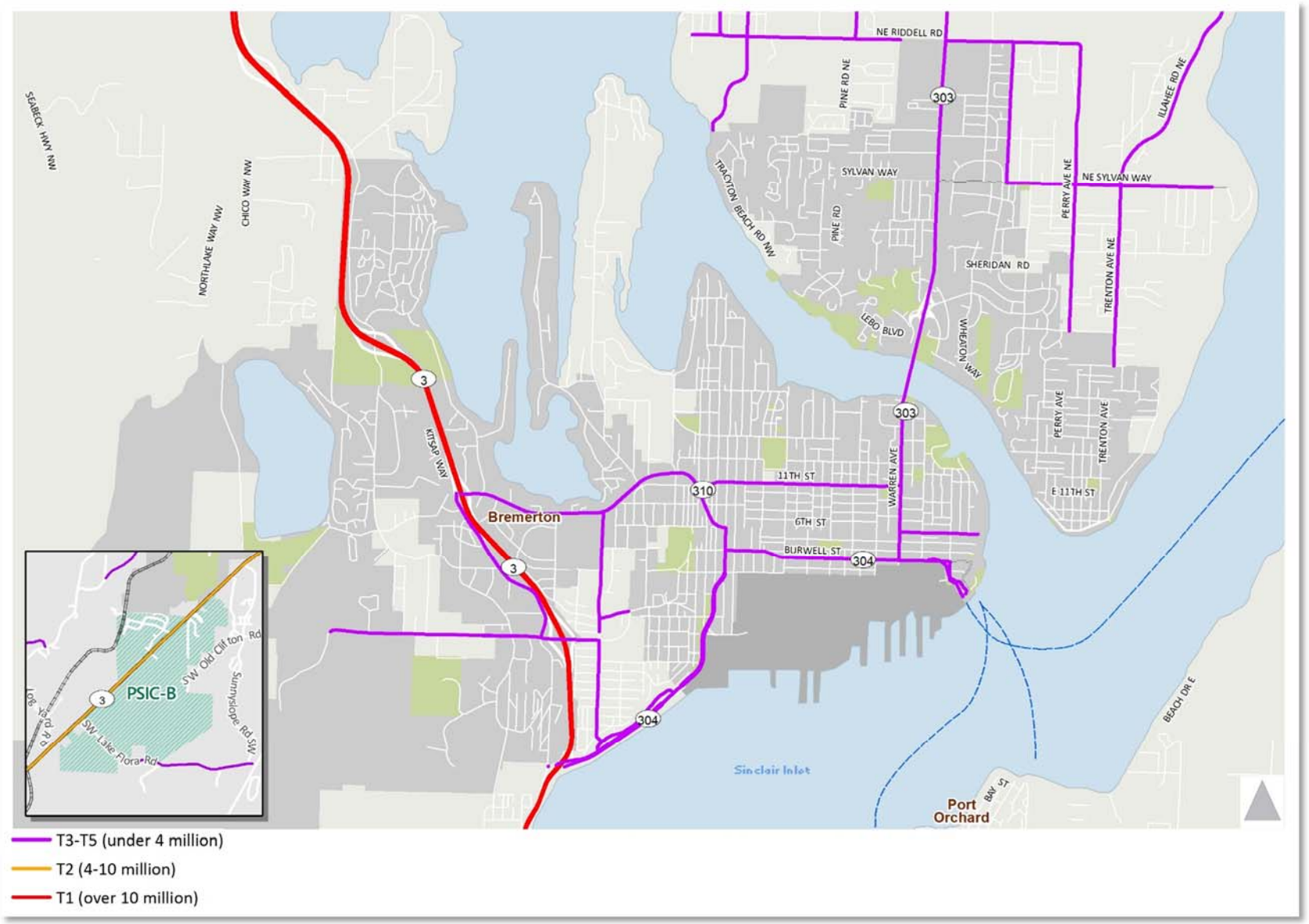
Freight movement in Bremerton occurs primarily via the State Routes (SR) that serve the City. SR 3, SR 304, and SR 310 are identified as WSDOT Highways of Statewide Significance. SR 3 is a grade-separated freeway that travels through West Bremerton and is classified by WSDOT as a T-1 Freight Corridor. SR 304, classified as a T-3 Freight Corridor, connects Bremerton with the Bremerton Ferry Terminal to the east and SR 3 to the west, providing access to PSIC-Bremerton and other industrial uses south of Bremerton. SR 310, another T-3 corridor, is a principal arterial that serves as an east-west distributor of freight traffic within the City. In addition, both SR 303 and National Ave serve as north-south city designated truck routes.

The WSDOT freight corridors that serve Bremerton along with additional truck routes designated by the City are shown in **Figure 10**.

In addition to highways and city truck routes, railroads and air facilities are key elements in freight distribution. The Bremerton National Airport handles a variety of imports and exports. Because PSIC-Bremerton is a Free-Trade Zone, companies have the option of avoiding certain duties and fees if they import parts into Washington and do their final assembly there. The Bremerton National Airport, in conjunction with the freight railroad corridor that parallels the west side of SR 3, provides the opportunity to serve these industrial uses and promote the movement of materials and finished goods. Consistent with FAA and WSDOT guidance, the PSIC Subarea Plan outlines policies that ensure future land uses and development are compatible with Bremerton National Airport and the industrial character of the PSIC-Bremerton.

Source: Google, 2015

Figure 10: Existing WSDOT and City Truck Routes



Motor Vehicles

With many Bremerton residents choosing motor vehicles as their primary mode of transportation, the City's street and roadway network is critical to the transportation system. Increased growth within the region has led to more traffic congestion along the State Routes and Bremerton's main corridors.

An analysis of intersections within the city limits was performed to assess existing traffic operations and the need for future roadway improvements. Given the extensive nature of previous studies, such as the PSIC-Bremerton Subarea Plan[5] and the SR 3/SR 304 Bremerton Interchange Improvements Study, which involved detailed LOS analysis and identified a range of projects needed to support Bremerton's transportation system, 14 intersections were selected due to their location on critical corridors within the City. Projects identified in previous studies are included in the final 20-year project list on page 44.

For this analysis, intersections were assigned a level of service (LOS) grade based on their operations in terms of vehicle delay. **Table 2** describes the Level of Service definitions laid out in Chapter 16 of the *Highway Capacity Manual* (HCM) (Transportation Research Board, 2010), which is the methodology used for most of the intersections within the study. In a few locations, HCM 2000 was used due to limitations in applying the HCM 2010 methodology.

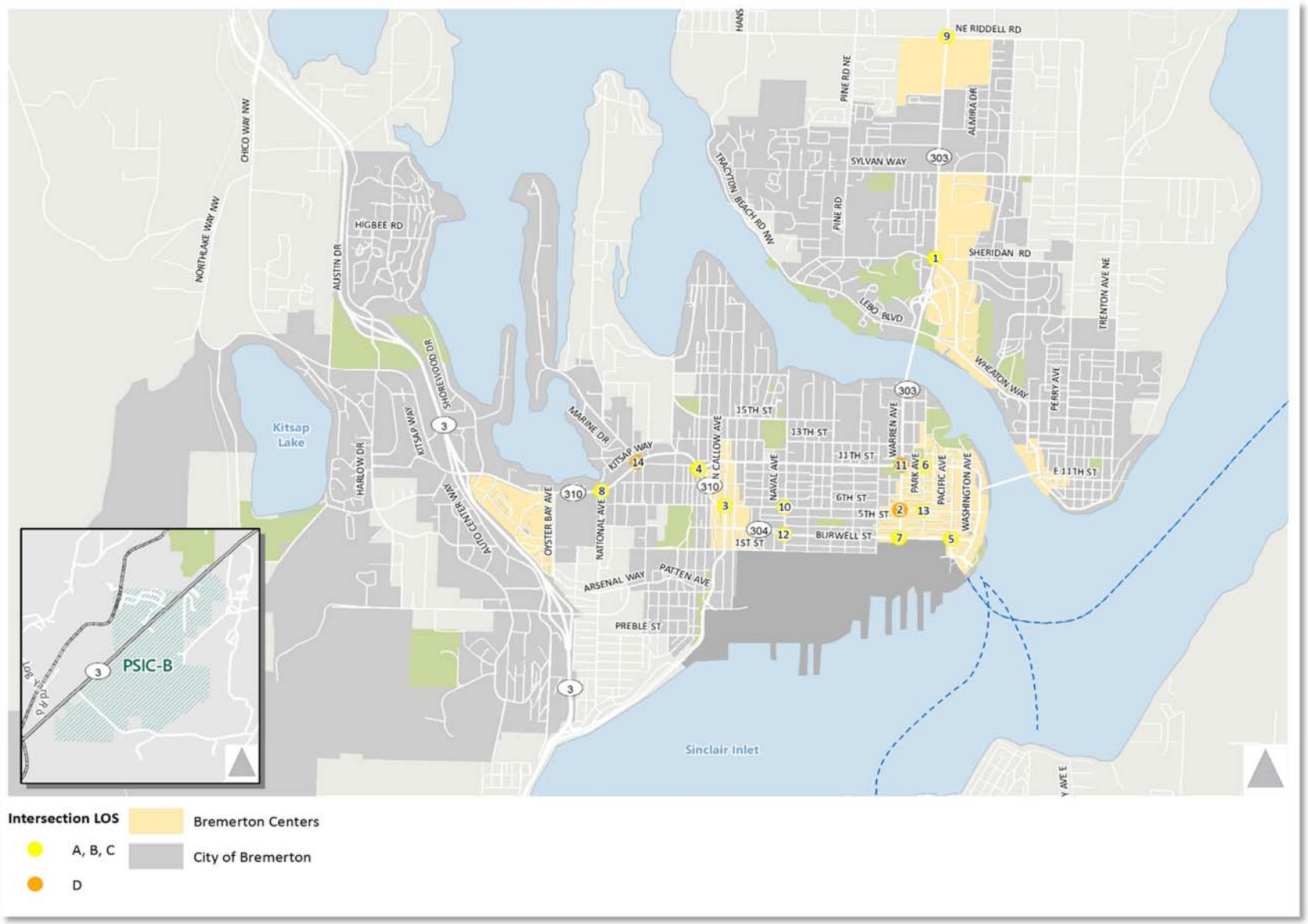
Figure 11 on the following page summarizes the intersection LOS analysis. Detailed reports of LOS are available in the **Technical Analysis.**

Table 2: Level of Service Definitions

LOS	DESCRIPTION
A	Free-flowing conditions.
B	Stable operating conditions.
C	Stable operating conditions, but individual motorists are affected by the interaction with other motorists.
D	High density of motorists, but stable flow.
E	Near-capacity operations, with significant delay and low speeds.
F	Over capacity, with delays.

[5] Formerly known as the SKIA Subarea Plan

Figure 11: Auto Level of Service



The City's level of service (LOS) policy aims to develop a transportation system that achieves a level of service (LOS) that balances multimodal needs and mobility. The City will maintain a LOS E or better (V/C less than or equal to 1.0) throughout the City; except along SR 310, which is a Highway of Statewide Significance (HSS) route.

All intersections analyzed meet the City's current level of service (LOS) standards. However, the following intersections are close to exceeding the acceptable maximum vehicle delay of the standards:

- Warren Avenue (SR 303) and 6th Street - (LOS D approaching LOS E)
- Warren Avenue (SR 303) and 11th Street - (LOS D approaching LOS E)

These intersections are located along key east-west and north-south corridors. SR 303 is a three to four-lane principal arterial road, which extends from Burwell Street (SR 304) in Bremerton to Waaga Way (SR 3/SR 303) at its northern terminus in Silverdale.

Opportunities and Challenges

The City of Bremerton has several important challenges to face as it prepares for future growth and the development of its downtown core, city centers, and PSIC-Bremerton. Motor vehicle travel dominates the City's transportation framework and contributes to congestion in Bremerton, especially during peak commute hours. Bremerton is working to create a more vibrant community that promotes an integrated multimodal transportation system, which will be key to addressing the transportation challenges within the city.

Network Connectivity

The Bremerton Transportation Center and Ferry Terminal serve as a major transportation hub for Kitsap County. With close access to Seattle, many regional commuters travel through Bremerton to access the ferry. Bremerton is also home to the largest employer in Kitsap County, Naval Base Kitsap (NBK-Bremerton). NBK-Bremerton places significant demands on SR 304 and surrounding roadways, especially during afternoon shift changes. Due to Downtown Bremerton's status as major center for commuters, the local transportation network experiences significant traffic surges in driving, walking, biking, and transit during peak hours.

Pedestrian and Bicycle Infrastructure

Bremerton downtown has a relatively complete network of sidewalks, however high pedestrian activity areas such as schools and shopping areas have gaps in the sidewalk and pedestrian facilities. This limits mobility and accessibility of some pedestrians between major destinations. Additionally, the city has a bicycle network that is limited to a small number of shared use trails, on-street facilities, and disjointed marked bicycle routes. These gaps in infrastructure, along with a topography that includes many hills, create travel challenges for pedestrians and bicyclists.

Transit Access and Availability

Kitsap Transit provides local, limited, and shuttle bus transit service on infrequent service schedules. This limits transit-dependent riders' accessibility, and it causes potential transit users to choose driving personal vehicles. In addition to fixed route and shuttle services,

Kitsap Transit offers a worker/driver bus program, which functions similarly to a large carpool. This program has seen success in reducing the number of drive alone commute trips within Bremerton at NBK-Bremerton.

The City should continue to look for ways to encourage enhanced transit service from Kitsap Transit through investments in projects that compliment transportation demand management programs such as the worker/driver bus, as well as transit-supportive amenities to help residents, employees, and visitor's access and use transit.

Ferry Service Access and Availability

Both Kitsap Transit and Washington State Ferries serve the Bremerton Ferry Terminal. Ferry service in Bremerton serves thousands of weekly commuters. During peak hours, the Ferry Terminal experiences significant surges in vehicle, walking, and bicycling traffic. Improving bicycle and pedestrian connections to the Ferry Terminal can help to further alleviate congestion in the downtown area.

Regional Growth

Regional development outside of Bremerton will play a major role in the growing demands on the City's transportation network by 2036. Kitsap County is expected to continue adding residents and jobs during this time period. This growth will add traffic to Bremerton's streets, and the City must make a concerted effort to accommodate its own growth, while coordinating with its partners outside the city on regional needs.

Puget Sound Industrial Center (PSIC)

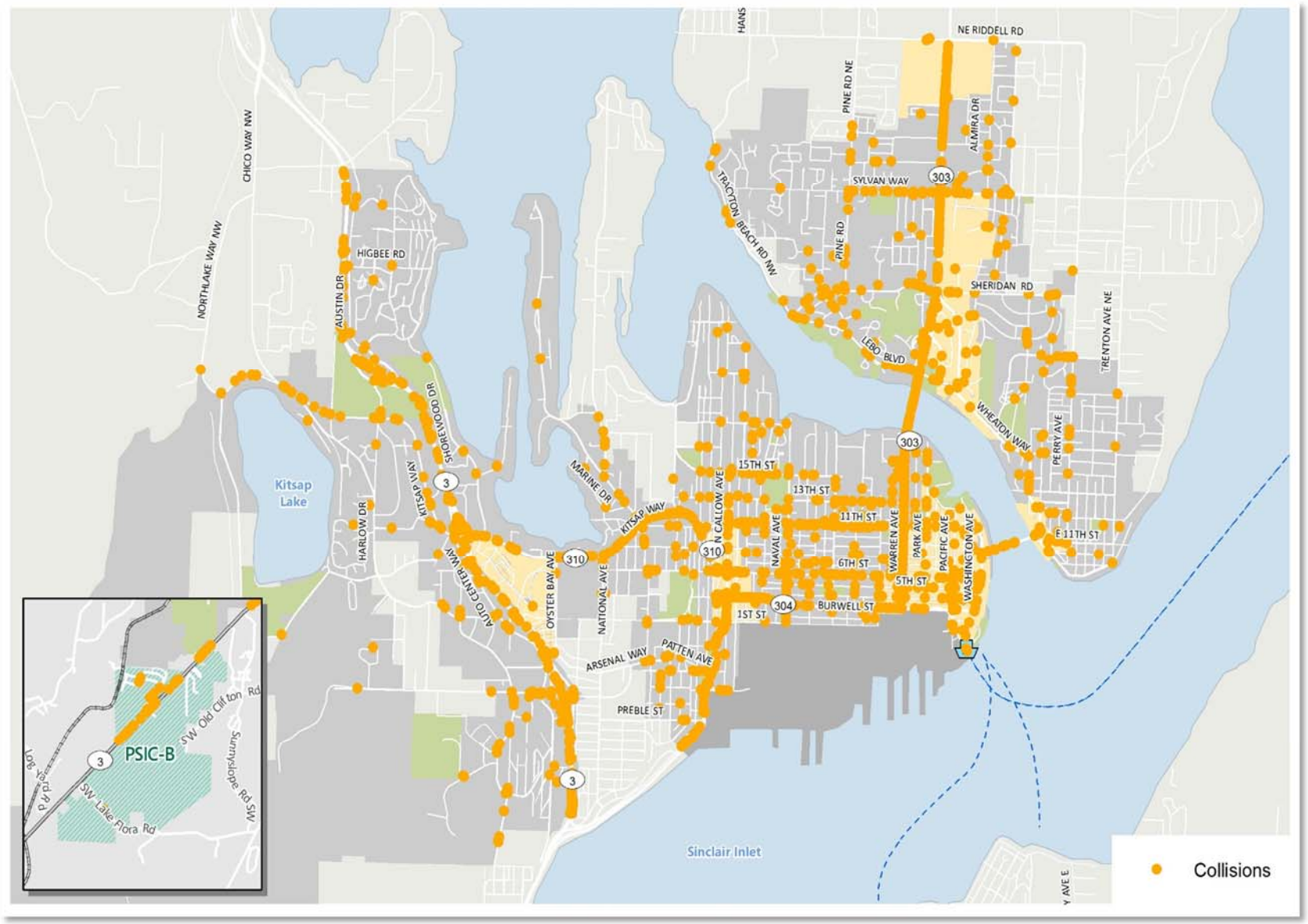
According to the PSIC Subarea Plan (formerly known as the SKIA Subarea Plan), 12 miles of trails are planned within the development area. It is anticipated that new roadways would have sidewalks on at least one side of the corridor. At this time, there are no other planned or funded transit, pedestrian, or bicycle improvements anticipated within PSIC-Bremerton. As PSIC-Bremerton develops as an attractive job center and employment grows, it is possible Mason Transit or Kitsap Transit will provide bus service.

Safe Routes for All, Especially Pedestrians and Bicycles

Since 2010, Bremerton has experienced nearly 700 traffic collisions per year. **Figure 12** display traffic crashes around the City over a five-year period spanning 2010-2014. **Figure 13** shows the severity of accidents by location. **Figure 14** displays bicycle and pedestrian crashes.

As an effort to increase pedestrian safety, Bremerton has undertaken sidewalk and crosswalk improvement projects to create a better environment for pedestrians moving around downtown, routes to schools, and key corridors. Corridors with a high number of collisions involving pedestrians and bicyclists include Warren Avenue, Burwell Street, and 6th Street. There were four vehicle related fatalities; two on SR 3, one on Wheaton Way, and one on Schley Blvd; and one pedestrian fatality on SR 30.

Figure 12: Collisions



Disclaimer: Under 23 U.S. Code § 409, safety data, reports, surveys, schedules, lists complied or collected for the purpose of identifying, evaluating or planning the safety enhancement of potential crash sites, hazardous roadway conditions, or railway-highway crossings are not subject to discovery or admitted into evidence in a Federal or State court proceeding or considered for other purposes in any action for damages arising from any occurrence at a location mentioned or addressed in such reports, surveys, schedules, lists or data.

Figure 13: Severity of Accidents

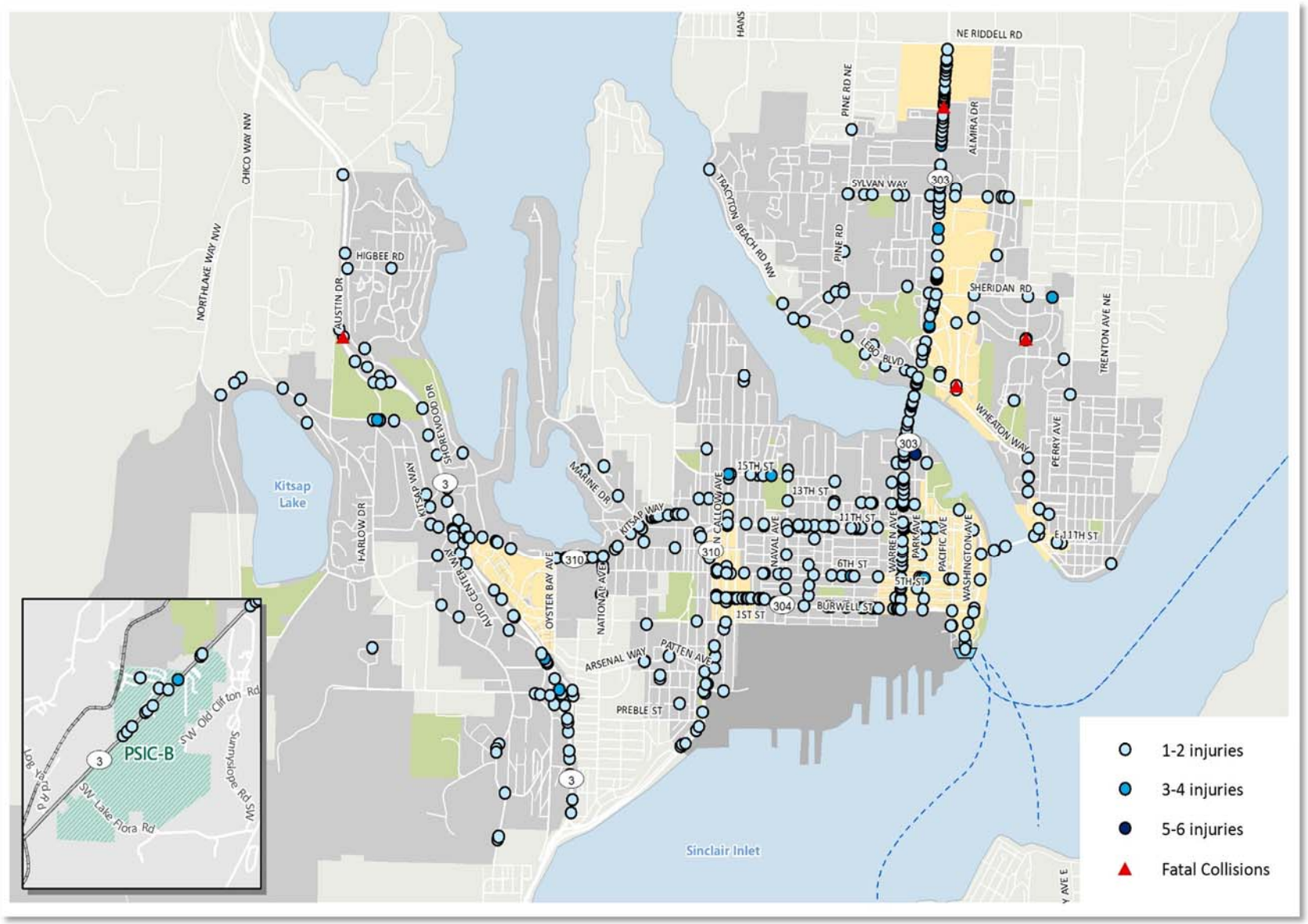


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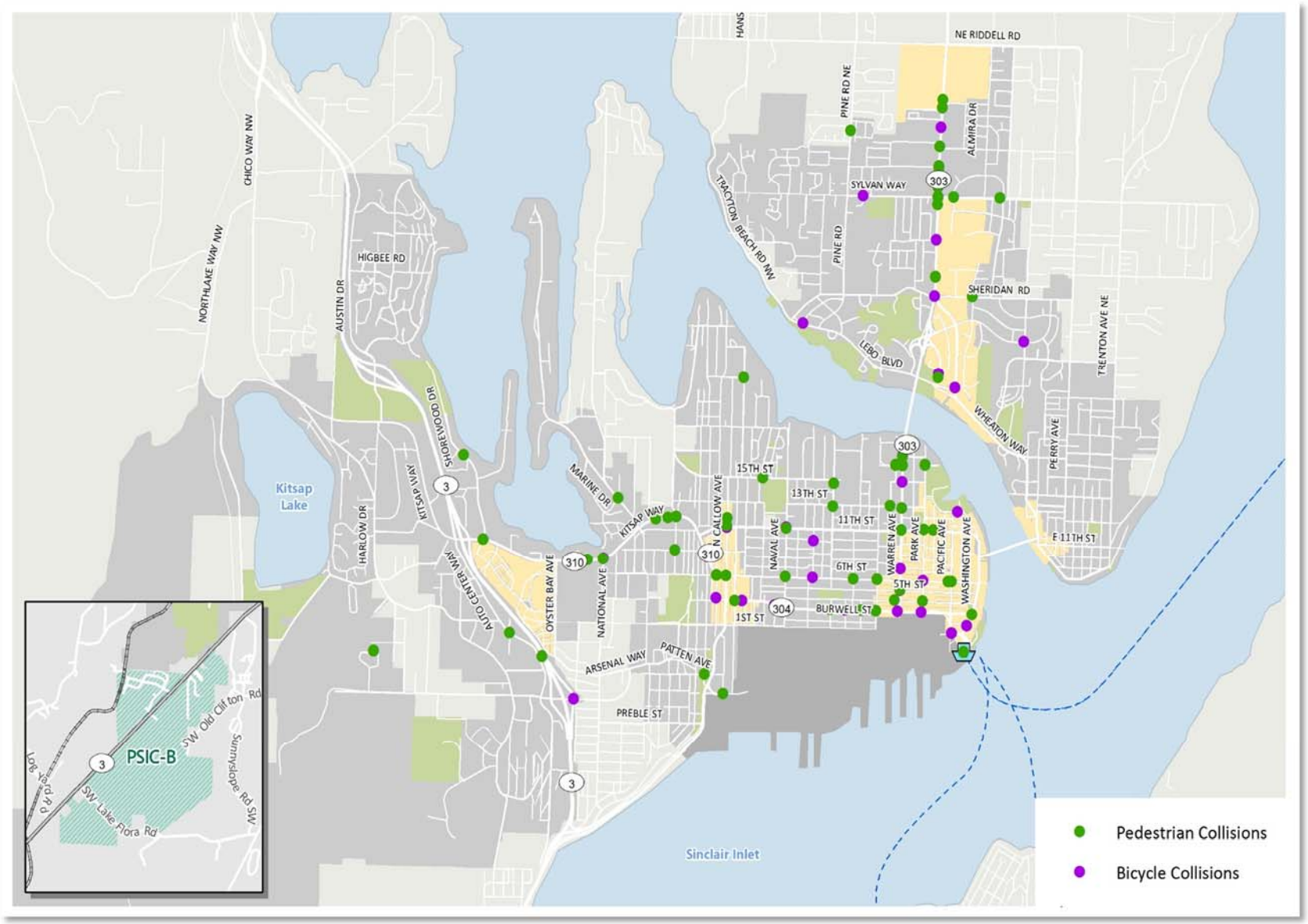
Figure 14: Bicycle and Pedestrian Collisions



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Downtown Circulation

Bremerton's downtown circulation pattern is a mixed network of one-way and two-way streets that face unique geographic and traffic demands. The downtown core is the primary area of congestion for Bremerton. Much of the community recognizes that Bremerton's congestion is greatest between 4:00 pm and 4:45 pm. During this time, many workers are released from work, including approximately 20,000 civilians and active duty personnel who work for Navy Commands located on NBK-Bremerton. This is approximately 5,000 people less than the 2014 Seattle Mariners' average attendance.

This results in a rush of vehicles departing from downtown parking garages, bus trips departing from the Bremerton Transportation Center, and ferry trips arriving/departing to Seattle, Port Orchard and Annapolis. As a result, daily vehicle traffic backs up quickly on Burwell Street, 6th Street, 11th Street and Warren Avenue.

Between fixed-route buses and ferries connecting at the Bremerton Transportation Center, to the release of major employment centers during peak hours, Downtown Bremerton experiences significant multimodal traffic congestion. Adding to the congestion is limited east-west and north-south arterials that create chokepoints, such as the Warren Avenue and Manette Bridge. Some key elements to be recognized for downtown circulation include the following.

Naval Base Kitsap

Puget Sound Naval Shipyard and IMF and many other Navy Commands are located onboard NBK-Bremerton in the urban core of Bremerton. Due to its location and position as a major regional employment center, Navy Employers on NBK-Bremerton contribute to a significant amount of traffic congestion. During shift changes, traffic increases on the roadways surrounding the base, with the greatest number of vehicles exiting the base on weekdays around 4:00 pm.

There is a variety of transit incentives being utilized by employers located on NBK-Bremerton in coordination with Kitsap Transit and the Washington State Ferries to provide alternatives to driving to work. The Commands located on NBK-Bremerton expect to see increased employment in the future, which will further stress the transportation system surrounding the base as well as downtown parking availability, as many of the employees who work on the base currently use city-owned parking garages and surface lots.

Downtown Parking Demand

Bremerton's downtown on-street parking supply is currently available on a first-come, first-serve basis, with time restrictions in some locations. City-owned parking areas include Harborside Garage, Washington Garage, Park Plaza Garage, City Lot 95, and City Lot 98. Anticipated growth and development in the central core may necessitate more active parking management in the future as demand for parking increases.

Peak Hour Transit Ridership

During morning and afternoon peak hours, the Bremerton Transportation Center and Ferry Terminal experience high numbers of passengers. The ferry service alone experiences over 10,000 boardings weekly on Kitsap Transit foot ferries to Annapolis and Port Orchard, and over 28,000 weekly boardings between Bremerton and Seattle.

Community Outreach

Community input regarding the future of transportation in Bremerton was collected at a public meeting and stakeholder workshop. Community members and stakeholder groups were asked to answer questions regarding the future of Bremerton's transportation in regards to prioritizing projects and funding, as well as identifying priority network routes and projects for all modes. Participants showed a desire for multimodal investments, improved network connectivity, and enhanced safety in Bremerton.

Stakeholder Meeting

On July 28th, 2015 a stakeholder workshop was conducted with the City of Bremerton and key stakeholders. The purpose of the meeting was to examine the transportation needs of Bremerton and identify both transportation challenges and opportunities for improvement. Stakeholder feedback, in regards to the most needed and visionary projects for Bremerton, can be seen in **Table 3.**

Table 3: Stakeholder Input

WHAT IS THE MOST NEEDED PROJECT IN BREMERTON?	WHAT IS THE MOST VISIONARY PROJECT FOR BREMERTON?
• Multimodal connections to Bremerton Centers	• Have the choice to move safely through Bremerton by all modes
• Updated facilities for all users	• Create an interconnected multimodal transportation system
• Roadway maintenance	• Create a seawater path system
• Parking management	• Improve parking management and repurpose underutilized lots
• Ferry connections	• Increase land use diversity in downtown
• ADA facilities and improvements	• Improve Kitsap Transit connections to Olympic College
• Traffic congestion relief on SR 3/304 interchange	• Be the transportation hub of Kitsap County
• East-west bicycle routes	• Adapt to new transportation technologies

Public Meeting

Nearly 200 comments were received at the public meeting. Community members provided input on what impacts how people travel in Bremerton today and what transportation projects should be the highest priority for funding. Respondents showed a desire for multimodal investments to reduce congestion, enhance safety and improve network connectivity.

It is important to note that the comments collected likely underrepresent regional commuters, as the majority of respondents were local residents. In addition, the meeting was heavily attended the bicycle community, which may have over represented Bremerton residents' bicycle interests and priorities.

Approximately 60 percent of the issues affecting residents' travel today involved safety (23%) and the lack of pedestrian (22%) and bicycle (15%) facilities, as seen in **Figure 15.**

Figure 16 outlines which projects were identified as the highest priority for funding—the top tier projects included:

- Build more sidewalks and crosswalks, improve existing crosswalks
- Make routes for bikes on quiet streets (greenways)
- Provide bike lanes on arterial streets
- Replace and repair older infrastructure

Figure 15: Greatest Impacts to Travel

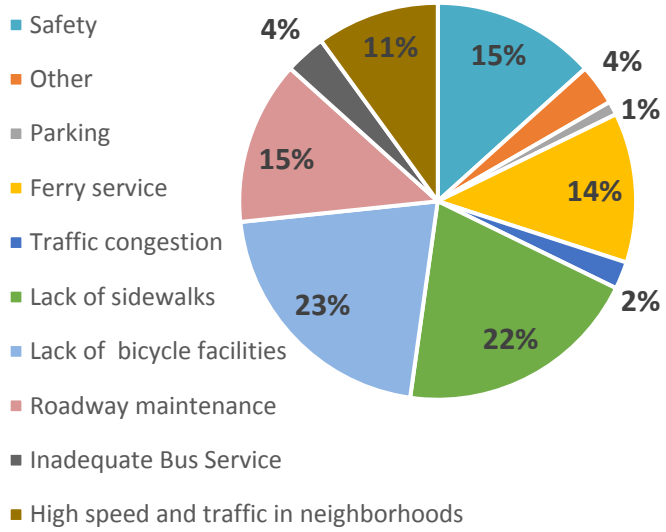
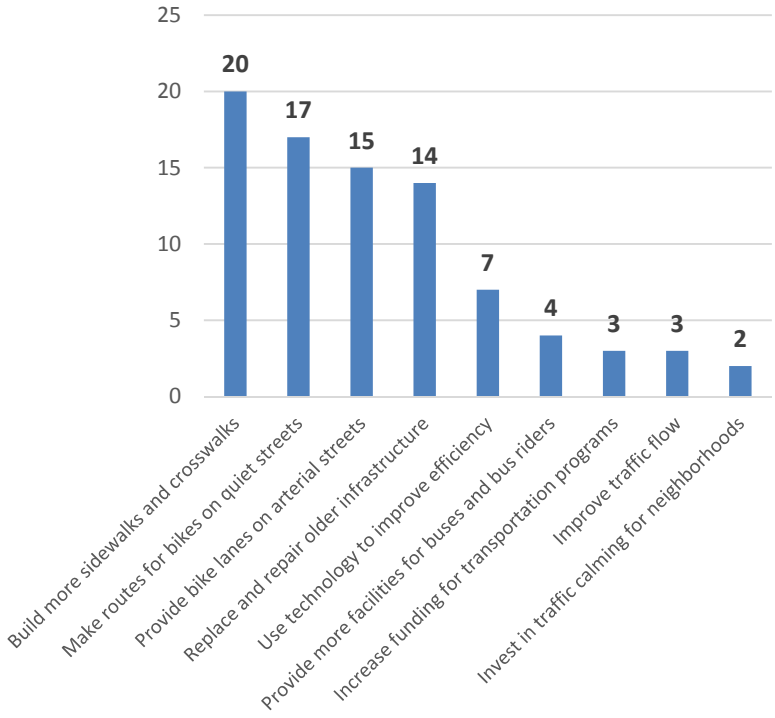


Figure 16: Priorities for Funding



Transportation
Section 3: Future Transportation Vision

Bremerton envisions a future transportation system that serves all users and modes of travel by offering a safe and robust network of walkways, bicycle facilities, intersections, and roadways. This section describes Bremerton's vision for its future transportation network and the infrastructure improvements that will get the City there.

As a part of the Comprehensive Plan update, the City is planning for expected growth in housing units and employment over the next 20 years through 2036. Based on growth estimates from the Puget Sound Regional Council (PSRC) and review by City staff, Bremerton is preparing for 8,050 new housing units and 20,244 new workers by 2036 within the city limits and urban growth area. This translates into a population growth of approximately 1.5 percent annually.

As identified in this plan, most of the improvements are focused on the development of a 'layered' transportation network, which focuses less on providing vehicular capacity and more on accommodating all modes of travel. - While some of the roadway improvements are needed to meet the City's vehicular level of service (LOS) standard, many of the future improvements focus on providing safer and more complete facilities for walking, bicycling, and riding transit in order to improve access and mobility for all road users.

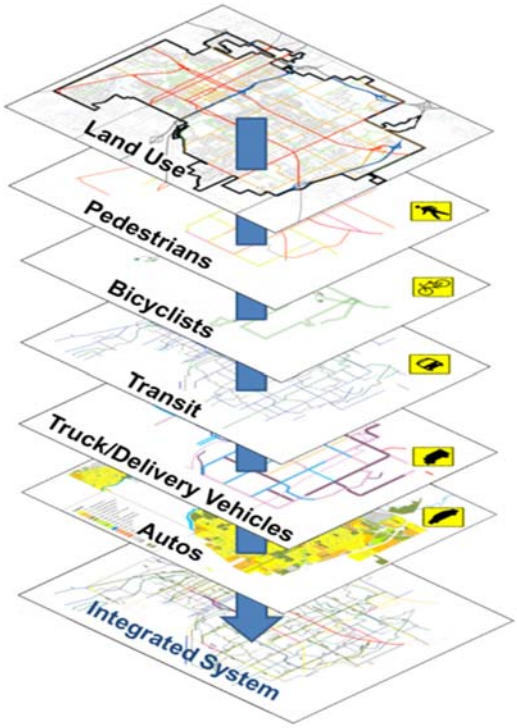
Introduction to the Layered Network

It can be a challenge for a single roadway to meet the demands and expectations of all modes at any given time. This is also generally not desirable from a user or a planning perspective.

In response to this challenge, the City of Bremerton has adopted a layered network approach that focuses on how the City's transportation network can function as a system to meet the needs of all users. In such a system, individual travel modes are prioritized on different facilities throughout the overall network. **Figure 17** illustrates the concept of a layered network.

The City will implement this layered network through a system of roadway typologies that define each street's user priorities and associated infrastructure needs.

Figure 17: Layered Network Concept



Modal Networks

Streets in Bremerton serve different travel purposes, and the modal networks therefore prioritize a different balance of users on each corridor. Determining how the entire transportation network fits together in Bremerton requires identifying desirable streets for each mode, combining them to locate overlaps, and then assigning priority to certain modes. The following sections review the priority networks for each mode and establish their level of service standards.

Pedestrian

While Bremerton's local streets tend not to need fully separate sidewalks or paths due to their low traffic volumes and slow speeds, the City's arterials and commercial collectors do warrant pedestrian infrastructure. Dense areas with commercial land uses and streets that serve schools, parks, and churches are particularly important for safe walking, as they support more pedestrians and may have a larger portion of vulnerable users than other streets.

Figure 18 highlights the *Pedestrian Priority Network*, which specifies where pedestrian infrastructure should be provided in the long-term.

Building on the *Pedestrian Priority Network*, **Table 4** establishes guidance in terms of the level of accommodation that the City wishes to provide for pedestrians around the City.

The highest level of accommodation for walking, indicated in the green row, would provide sidewalks on both sides of the road as shown in the *Pedestrian Priority Network*. The yellow level of accommodation would make strong progress in building out the *Pedestrian Priority Network* by filling sidewalks gaps around the City in locations nearby pedestrian generators, such as retail, schools and parks. Incomplete or missing pedestrian facilities would fall into the red category and not satisfy the City's goals for accommodating pedestrians.

Table 4: Pedestrian Accommodation- Sidewalk Provision

WITHIN PEDESTRIAN PRIORITY NETWORK	
	Sidewalk provided on both sides of the road*
	Sidewalk or wide shoulder provided on one side of the road
	No pedestrian facility provided

Bicycling

Bremerton's existing bicycle network consists of bike lanes, shared-use markings and a number of trails and shared-use pathways. Bicyclists face many challenges connecting to existing facilities and traveling crosstown due to limited bicycle facilities, poor pavement conditions, and feelings of unease on the majority of the connecting roads. Key mobility corridors for bicyclists, such as Naval Avenue and Lebo Boulevard would be best served with on-street bike lanes, while bike boulevards and shared use paths would suffice on streets such as 4th and 5th Avenues.

Figure 19 highlights the *Bicycle Priority Network*, which specifies where pedestrian infrastructure should be provided in the long-term.

The City of Bremerton can strive for the green level of accommodation for bicycling by installing the bicycle facilities depicted in the *Bicycle Priority Network* or a facility that offers greater separation from vehicle traffic. At a minimum, the City should make meaningful progress toward constructing this network by building some initial north-south and east-west spines. Incomplete or missing bicycle facilities do not meet the City's desired level of accommodation for bicycling, as described in **Table 5.**

Table 5: Bicycle Accommodation- Facility Descriptions

WITHIN BICYCLE PRIORITY NETWORK	
	Provides minimum treatment* recommendation, as shown within the Bicycle Priority Network
	Provides a lower-level facility than recommend in the Bicycle Priority Network
	No bicycle facility or signage

Figure 18: Pedestrian Priority Network

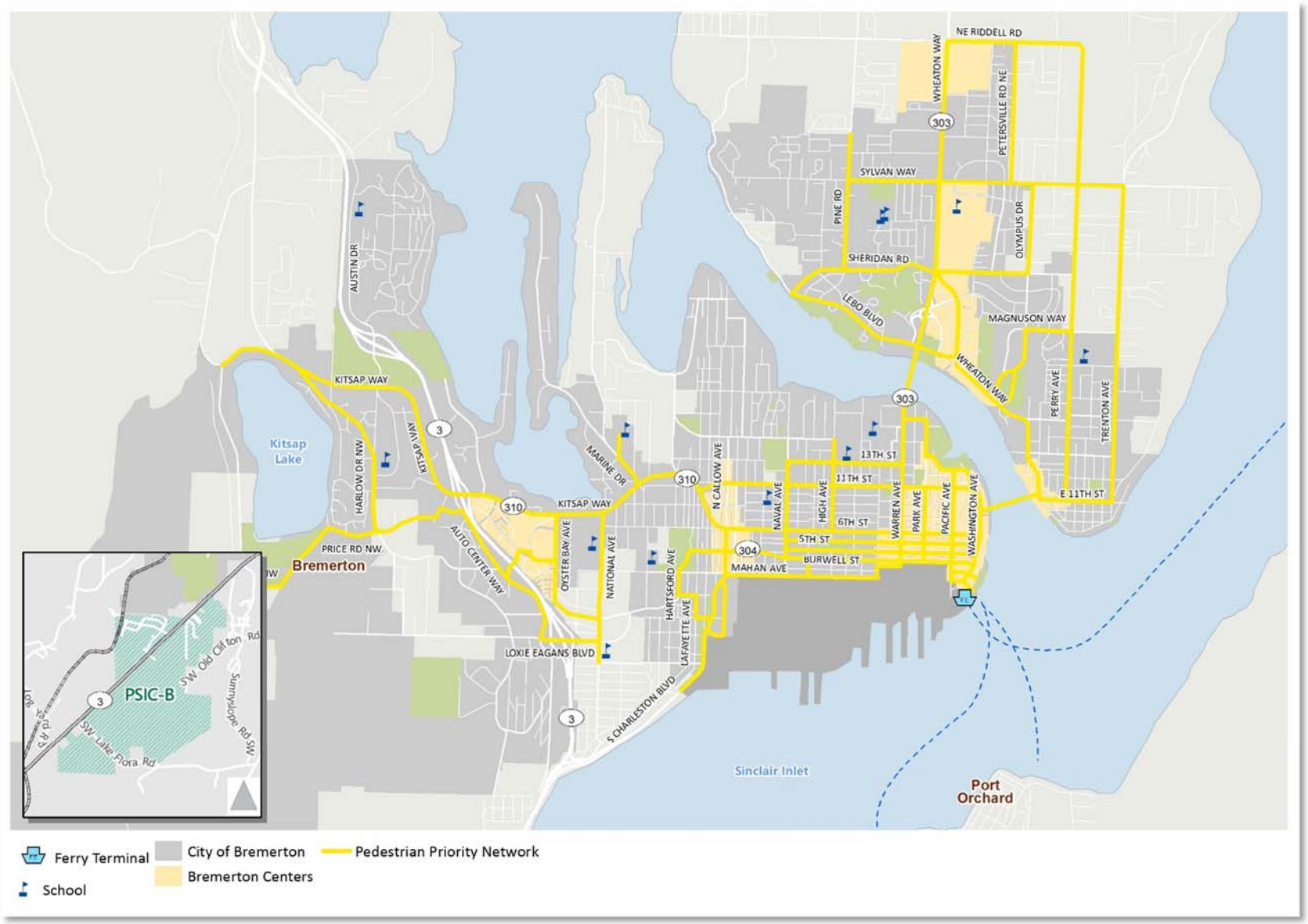
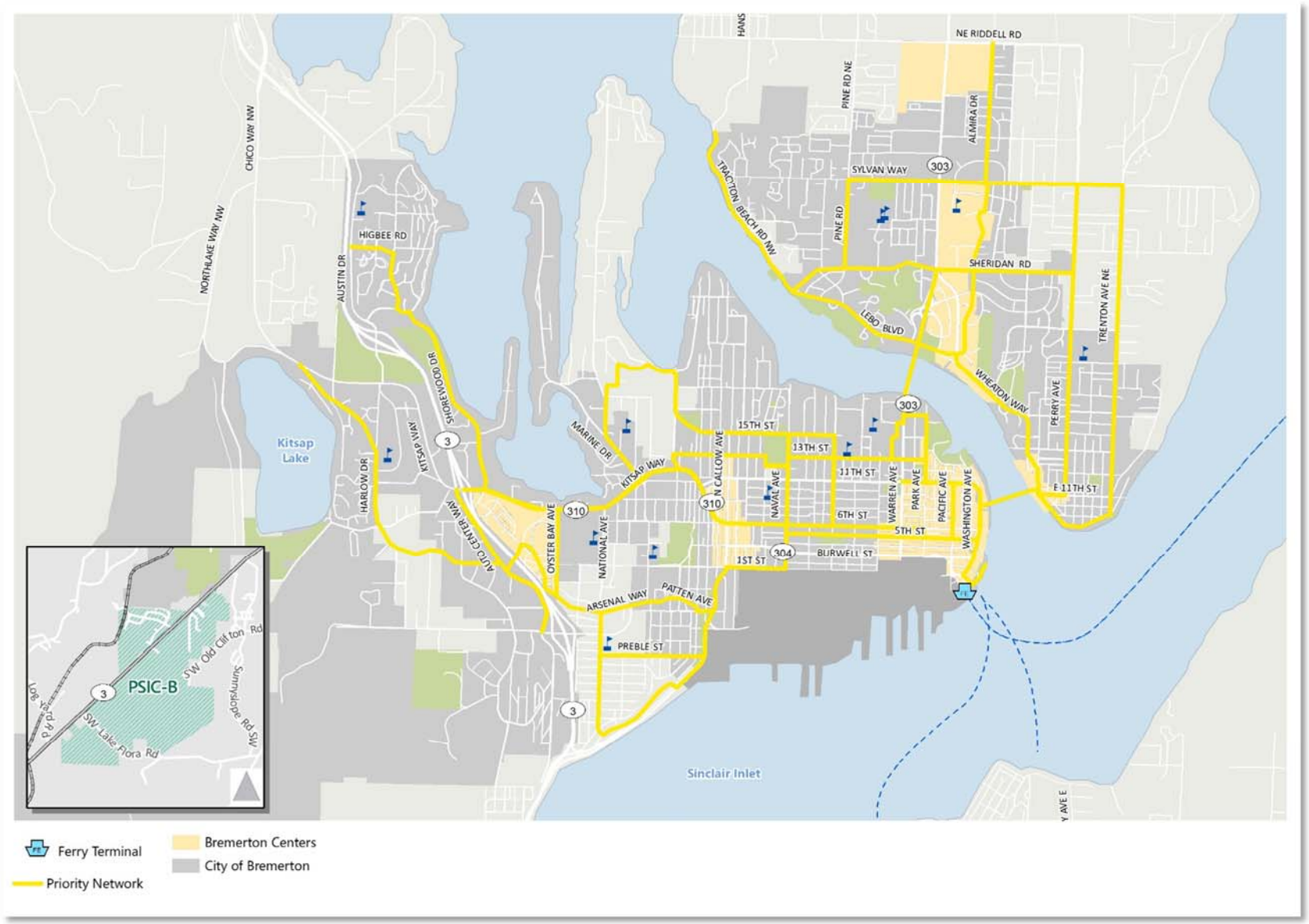


Figure 19: Bicycle Priority Network



Transit

Transit operations are out of the City's direct control, but Bremerton can still aim to create corridors that are welcoming to transit. The City will continue to work with transit agencies to enhance transit use by offering street lighting, safe routes for accessing transit stops, and other passenger amenities.

Bremerton's level of transit accommodation is based on the amenity provision guidelines established by transit agencies serving Bremerton. The City can reach the highest level of accommodation (green) by providing the level of transit-supportive amenities recommended including sidewalks, and marked crosswalks at all stops, as well as other supportive amenities, to support more frequent service. Bremerton's measurement of transit accommodation is summarized in **Table 6.**

Table 6: Transit Accommodation- Stop Amenities and Pedestrian Access

TRANSIT STOP AMENITIES	
	More than 80% of transit stops meet amenity minimum provisions
	More than 60% of transit stops meet amenity minimum provisions
	Less than 60% of transit stops meet amenity minimum provisions

REGIONAL TRANSIT COORDINATION

One of the City's top priority in this plan is effective coordination with regional players to ensure that the local and regional transportation systems complement one another. A key element of this will be partnering with Kitsap Transit, Mason Transit, and Washington State Ferries to provide local transit alternatives for getting across town. The potential increase in Kitsap Transit service offers a major opportunity to explore how the transit station can be better integrated with the City's multimodal transportation system and increase demand for local transit services.

Freight and Auto

Residents and workers in Bremerton use nearly every street in the roadway network at some point each day to access their homes, jobs, and other destinations. Many of these streets are local streets, however, and do not see significant traffic volumes throughout the day. Similarly, goods movement and delivery vehicles use some corridors frequently while other streets see only the occasional local delivery.

Figure 3 (page 12) calls out the functional classification of each of Bremerton's streets, in terms of whether it is an arterial, collector, or local street. These classes indicate the level of priority of each street for automobiles, specifically in terms of facilitating vehicle and freight mobility as well as other modes.

Bremerton's transportation network is constantly evolving along with the character of its roadways. As part of this update, changes to Bremerton's functional classification are being considered for roadways such as Sherman Heights Road, Charleston Beach Road, Cherry Avenue, and others.

Figure 10 (page 22) specifies the WSDOT freight classification of Bremerton's major streets that support goods movement. These classifications indicate the annual weight of goods that travel a corridor, whether via large trailer loads or smaller delivery vehicles.

The functional classification and freight class of a street should guide future investments in streetscape and LOS objectives.

Given the low growth rates for household and employment projected for Bremerton, future forecast delay at intersections differ little than from today. Of the 14 intersections analyzed as part of this update, all intersections (existing and future) meet the City's LOS standards. Also, the growth anticipated on state-owned facilities is driven by regional growth, as well as growth anticipated within the City. To address this, the City's network has capacity to absorb some growth. Delays on parts of the City's network are a result of backups on the regional network, rather than local-level capacity constraints.

The **Technical Analysis** of this Appendix summarizes existing and future forecast delay at intersections in the City. The capital list provided in next section includes future roadway projects that would maintain the City's intersection LOS standard through 2036.

Mode split targets

For its regional growth centers (RGCs), the City of Bremerton is required to develop mode split targets that align with the policy goals of planning these areas to be more compact and accessible for walking, biking, and transit modes. The following table provides existing and envisioned future mode split targets for commute trips within Bremerton's Downtown Regional Growth Center and the Puget Sound Industrial Center (PSIC), which is a Regional Manufacturing/Industrial Center.

The 2010 mode share estimates come from Puget Sound Regional Council's (PSRC's) regional travel survey. The future mode share estimates for each center were developed based on national travel survey, which show how non-SOV mode share can increase when a greater mix of uses, improved infrastructure for walking and biking, and proximate transit are provided.

These increased non-SOV mode shares reflect the City's goal of accommodating travel by all modes and prioritizing transportation investments within the regional growth centers (RGCs). These mode share goals also informed the travel modeling performed for this plan to ensure that transportation infrastructure investments align with forecasted travel demand.

Table 7: Mode Split Targets for Regional Growth Centers in Bremerton

MODE	DOWNTOWN BREMERTON		PUGET SOUND INDUSTRIAL CENTER	
	2010[1]	2036	2010[1]	2036
Drive Alone	69%	66%	89%	85%
Carpool	9%	10%	9%	11%
Transit	13%	14%	1%	2%
Walk/Bike	9%	10%	1%	2%

Transportation
Section 4: Transportation Projects

This section presents the capital and roadway maintenance projects that forms the basis of this Transportation Plan.

The overall capital plans were developed to create a transportation system that realizes Bremerton's ultimate transportation vision: to promote, manage, and maintain a safe, efficient, and integrated multi-modal transportation system to support a healthy and vibrant community.

- T1: Promote and develop transportation systems that stimulate, support, and enhance the movement of people and goods to ensure a prosperous economy.
- T2: Acknowledge the existing built environment and maintain, preserve, and extend the life and utility of prior investments in transportation systems and services.
- T3: Provide for and improve the safety and security of transportation users and the transportation system.
- T4: Enhance Bremerton's quality of life through transportation investments that promote energy conservation, healthy communities, aesthetics, and protect the environment.
- T5: Continuously improve the quality, effectiveness, and efficiency of the transportation system.

With these goals in mind, as well as completing the layered networks described in the previous sections, the project list was developed.

Table 8 summarizes the recommended capital projects for the City and PSIC-Bremerton[6], as well as operation and maintenance needs for the next twenty years. These projects represent a balance of safety, maintenance, and operational improvements for all modes.

Figure 22 to 24 display the locations of these projects around the City.

[6] Summarizes the projects that were identified for PSIC-Bremerton through the PSIC Subarea Plan

Table 8: Twenty Year Project List

8.1 Twenty Year Capital Projects				
Project #	**Project Title**	**Benefit to Bremerton**	**Total Cost**	**Goal Met**
1	**SR3 Corridor Planning/Environmental**	Reduce traffic congestion and improve accessibility	$15,000	T1, T3, T5
2	**Highway Safety Improvements Project - Phase 2**	Improve safety and accessibility	$951,000	T1, T2, T3, T5
3	**Crosswalk Project Bundle**	Improve pedestrian safety and connectivity	$670,000	T1, T3, T4, T5
4	**ADA Transition Plan**	Improve pedestrian safety and connectivity	$200,000	T1, T3, T4, T5
5	**Non-motorized Transportation Plan Update**	Improve bicycle and pedestrian travel in Bremerton	$50,000	T1, T3, T4, T5
6	**Traffic Calming**	Improve safety for all modes	$160,000	T1, T3, T4, T5
7	**Sidewalk Improvements (Sidewalk Abatement Fund)**	Improve pedestrian safety and connectivity	$1,780,000	T1, T3, T4, T5
8	**City Safety Improvement - Annual Program**	Improve safety citywide	$500,000	T3, T5
9	**Signal System Upgrades**	Upgrade signals to help move traffic and improve level of service	$1,025,000	T1, T2, T3, T5
10	**Lebo Blvd, Wheaton Way to City Limits Nonmotorized Improvements**	Improve bicycle and pedestrian safety and connectivity	$3,350,000	T1, T3, T4, T5
11	**Crownhill Elementary Safe Routes to Schools**	Improve bicycle and pedestrian safety near schools	$485,000	T1, T3, T4, T5
12	**Kitsap Lake Elementary - Safe Routes to Schools**	Improve bicycle and pedestrian safety near schools	$1,320,000	T1, T3, T4, T5
13	**View Ridge Safe Routes to Schools**	Improve bicycle and pedestrian safety near schools	$900,000	T1, T3, T4, T5
14	**Naval Avenue Safe Routes to Schools**	Improve bicycle and pedestrian safety near schools	$660,000	T1, T3, T4, T5
15	**Crownhill Elementary Safe Routes to Schools**	Improve bicycle and pedestrian safety near schools	$770,000	T1, T3, T4, T5

16	**Armin Jahr Elementary Safe Routes to Schools**	Improve bicycle and pedestrian safety near schools	$660,000	T1, T3, T4, T5
17	**National/Arsenal Safe Routes to School for STEM Academy (Joint w/ County)**	Improve bicycle and pedestrian safety near schools	$1,100,000	T1, T3, T4, T5
18	**Anderson Cove Sidewalks; 19th & Naval to 15th**	Improve pedestrian safety and connectivity	$440,000	T1, T3, T4, T5
19	**Matan & Lillian & James Walker Park Sidewalk Connector; Bloomington & Olympic**	Improve pedestrian safety and connectivity	$440,000	T1, T3, T4, T5
20	**Street Lights at Warren Avenue at 4th and 5th Street Crosswalks**	Improve safety for pedestrians at crossings	$30,000	T1, T3, T4, T5
21	**Install yellow-flashing lights on left turns city-wide**	Help move traffic and improve intersection level of service	$75,000	T1, T3, T5
22	**Washington Avenue, Warren to Manette Bridge**	Improve bicycle and pedestrian safety and connectivity	$2,750,000	T1, T3, T4, T5
23	**East Bremerton Shared Use Path (WSCC Initiative; connects to County)**	Improve bicycle and pedestrian safety and connectivity	$680,000	T1, T3, T4, T5
24	**Streets Electrical Cabinet Replacement Program**	Maintenance upgrades to streets electrical cabinets	$175,000	T2, T5
25	**Belfair Valley Road Shoulder Widening for Multimodal Travel**	Improve bicycle and pedestrian safety and connectivity	$450,000	T1, T3, T4, T5
26	**4th Street Landscaping Replacement / Sidewalk Repair**	Maintenance upgrades to sidewalk to improve pedestrian safety and connectivity	$400,000	T1, T2, T3, T4, T5
27	**Ped Connector Under Warren Avenue Bridge South Approach**	Improve pedestrian safety and connectivity	$500,000	T1, T3, T4, T5
28	**Warren Avenue Bridge Reconfiguration for Multi Use**	Improve bicycle and pedestrian safety and connectivity	$2,500,000	T1, T3, T4, T5
29	**SR303 Corridor Improvements - Burwell to Riddell**	Improve motor vehicle connectivity	$10,250,000	T1, T2, T5
30	**Wheaton Way - extend left turn pocket from 16th south to 13th for College Main Entrance**	Help move traffic and improve level of service near Olympic College	$700,000	T1, T3, T5

31	**Oyster Bay Avenue Improvements**	Help move traffic and improve roadway safety	$700,000	T1, T3, T4, T5
32	**Marine Drive NMT Improvements**	Improve bicycle and pedestrian safety and connectivity	$950,000	T1, T3, T4, T5
33	**Construct Werner Road widening and signal improvements**	Upgrade signals and roadway to help move traffic and improve level of service	$3,000,000	T1, T2, T3, T5
34	**Construct street lighting on Pine Road**	Improve roadway safety for all modes	$400,000	T3, T5
35	**Arsenal Way/Patton Ave Safety Improvements**	Improve bicycle and pedestrian safety and connectivity	$100,000	T1, T3, T4, T5
36	**Gorst Sinclair Trail (Planning)**	Improve bicycle and pedestrian safety and connectivity	$200,000	T1, T3, T4, T5
37	**Access ways in Dockside (Planning)**	Improve pedestrian safety and connectivity	$50,000	T1, T3, T4, T5
38	**Naval Ave Road Diet**	Improve bicycle and pedestrian safety and connectivity	$100,000	T1, T3, T4, T5
39	**Construct street lighting on Ricky Road per 2008 developer agreement**	Improve roadway safety for all modes	$200,000	T3, T5
40	**Shore Drive Shared Use path (Planning)**	Improve bicycle and pedestrian safety and connectivity	$60,000	T1, T3, T4, T5
41	**West Belfair Valley Road Guardrails - Evaluation and Implementation**	Improve roadway safety	$60,000	T3, T5
42	**City Street Lighting - evaluation and upgrade for compliance with standards**	Improve roadway safety for all modes	$50,000	T1, T3, T4, T5
43	**Hospital District Street Improvements; Callahan, Cherry, Wheaton**	Improve roadway safety for all modes	$50,000	T1, T2
44	**Replace traffic signs to meet retroreflective requirements**	Improve roadway safety for all modes	$200,000	T2, T5
45	**Sidewalk Improvement Wheaton Way at Callahan**	Improve pedestrian safety and connectivity	$187,504	T1, T3, T4, T5
46	**Sidewalk Ramp Reconstruction Warren Avenue - Wheaton Way Corridor (Joint w/ WSDOT)**	Improve pedestrian safety and connectivity	$100,000	T1, T3, T4, T5

47	**Bridge to Bridge Trail Wayfinding**	Improve bicycle and pedestrian safety and connectivity	$75,000	T1, T3, T4, T5
48	**Kitsap Way Bike Lane Improvements (See WSCC Proposal)**	Improve bicycle safety and connectivity	$200,000	T1, T3, T4, T5
49	**Lower Wheaton Way Reconstruction Lebo to Sheridan**	Improve bicycle and pedestrian safety and connectivity	$2,000,000	T1, T3, T4, T5
50	**West Kitsap Way Reconstruction / Rechannelization**	Improve motor vehicle connectivity	$3,000,000	T1, T3, T5
51	**Downtown Street Circulation Study**	Improve traffic circulation for all modes	$50,000	T1, T3, T4, T5
52	**Manette Traffic Circulation Study**	Improve traffic circulation for all modes	$25,000	T1, T3, T4, T5
53	**Repair Downtown Street Standard Banner Supports**	Maintenance improvements	$100,000	T2, T5
54	**State Street Pedestrian Corridor Improvements**	Improve pedestrian safety and connectivity	$5,000,000	T1, T3, T4, T5
55	**Kitsap Lake Vicinity Ped/Bike Improvements**	Improve bicycle pedestrian safety and connectivity	$6,000,000	T1, T3, T4, T5
56	**Warren Avenue Improvements for Bus Rapid Transit**	Improve transit service in Bremerton	$1,000,000	T1, T3, T4, T5
57	**Marine Drive LOS Improvements at Kitsap Way**	Reduce traffic congestion and improve accessibility	$1,500,000	T1, T5
58	**Warren Avenue Intersection LOS Improvements, Burwell to Bridge**	Reduce traffic congestion and improve accessibility	$8,000,000	T1, T5
59	**N/S Corridor Bike/Ped Backbone Improvements**	Improve bicycle pedestrian safety and connectivity	$3,000,000	T1, T3, T4, T5
60	**E-W Corridor Road Diet, Pacific to Kitsap Way**	Improve bicycle pedestrian safety and connectivity	$8,000,000	T1, T3, T4, T5

61	**Green Standard Pedestrian Improvements**	Improve pedestrian facility coverage (at least on one side of the street) to fill key gaps in non-local streets and near schools	$6,000,000	T1, T3, T4, T5
62	**Green Standard Bicycle Improvements**	Improve safety and comfort for people biking around the City through implementation of initial north-south and east-west spines, as well as bicycle boulevards	$3,000,000	T1, T3, T4, T5
63	**Yellow standard pedestrian improvements**	Improve pedestrian facility coverage (at least on one side of the street) to fill key gaps in non-local streets and near schools	$14,238,000	T1, T3, T4, T5
64	**Yellow standard bicycle improvements**	Improve safety and comfort for people biking around the City through implementation of initial north-south and east-west spines, as well as bicycle boulevards	$1,371,117	T1, T3, T4, T5
	Subtotal		**$102,952,621**	

8.2 Twenty Year PSIC-Bremerton Projects

Project #	Project Title	Benefit to Bremerton	Total Cost	Goal Met
1	**Area B Collector Road- new roadway west of SR 3 at Cross PSIC-intersections**	Support PSIC-Bremerton growth and development	$4,441,400	T1, T5
2	**Area C Collector Road- new roadway south of Lak Flora Road to the Belfair Bypass**	Support PSIC-Bremerton growth and development	$1,835,600	T1, T5
3	**Area D Collector Road- portion of new roadway south of Lake Flora Road**	Support PSIC-Bremerton growth and development	$498,000	T1, T5
4	**Area F Collector Road- new roadway north from Lake Flora Road**	Support PSIC-Bremerton growth and development	$3,140,000	T1, T5
5	**Area G Collector Road- new roadway east from Cross PSIC Roads**	Support PSIC-Bremerton growth and development	$415,100	T1, T5

6	**Local Access Projects- 5.64 miles of local access road**	Support PSIC-Bremerton growth and development	$8,933,800	T1, T5
7	**SR 3 / Imperial Way- signalize intersection, modify approaches**	Support PSIC-Bremerton growth and development	$2,000,000	T1, T5
8	**SR 3 / Sunnyslope Road- signalize intersection, modify approaches**	Support PSIC-Bremerton growth and development	$2,000,000	T1, T5
9	**SR 3 / SR 16 / Sam Christopherson Ave- grade separation**	Support PSIC-Bremerton growth and development	$63,000,000	T1, T5
10	**Old Clifton Road / SR 16 Eastbound Ramps- Signalize intersection add dedicated right turn EB and dedicated left turn WB**	Support PSIC-Bremerton growth and development	$1,000,000	T1, T5
11	**Old Clifton Road / SR 16 Westbound Ramps- signalize intersection**	Support PSIC-Bremerton growth and development	$500,000	T1, T5
12	**Analysis Area C and SR 3- New intersection southwest of existing Lake Flora Road / SR 3 intersection**	Support PSIC-Bremerton growth and development	$2,000,000	T1, T5
13	**Analysis Area C/D and Lake Flora Road- New intersection southeast of existing Lake Flora Road / SR 3 intersection**	Support PSIC-Bremerton growth and development	$1,000,000	T1, T5
14	**Cross-SKIA Connector and Lake Flora Road- New intersection at southern terminus of extension of Cross-PSIC Connector**	Support PSIC-Bremerton growth and development	$1,000,000	T1, T5
15	**Cross-SKIA Connector / Analysis Area B / SR 3- New intersection at northern terminus of Cross-SKIA Connector**	Support PSIC-Bremerton growth and development	$500,000	T1, T5
16	**SR 3 Widening- Widening from Imperial Way to Gorst**	Support PSIC-Bremerton growth and development	$109,000,000	T1, T5

17	**Lake Flora Widening- Widening to southern end of potential southern end of Cross-PSIC Bremerton roads**	Support PSIC-Bremerton growth and development	$3,201,100	T1, T5
18	**Belfair Bypass- 2-lane divided highway with capability for 4 lanes**	Support PSIC-Bremerton growth and development	Funded[7]	T1, T5
19	**Trails-12 miles of trails**	Support PSIC-Bremerton growth and development	$1,300,000	T1, T3, T4, T5
	Subtotal		**$205,765,000**	
8.3 Operations and Maintenance Projects				
Project #	**Project Title**	**Benefit to Bremerton**	**Total Cost**	**Goal Met**
1	**Austin Drive Pavement Preservation**	Pavement overlay	$800,000	T2, T5
2	**Pavement Preservation including Transportation Benefit District**	Pavement overlay	$8,000,000	T2, T5
3	**Manette E. 11th Sidewalk Storm Low Impact Development Retrofit**	Maintenance upgrades to the roadway	$550,000	T2, T5
4	**Annual General Maintenance and Operations Costs**	General operations and maintenance	$50,000,000	T2, T5
5	**Annual Maintenance Program: Arterial and Local Streets Major Maintenance and Reconstruction**	Maintenance and pavement overlays for roadway	$170,000,000	T2, T5
	Subtotal		**$179,350,000**	
	Total		**$488,067,621**	

[7] Funded as part of 2015 Leap Projects

Figure 20: Pedestrian Facilities

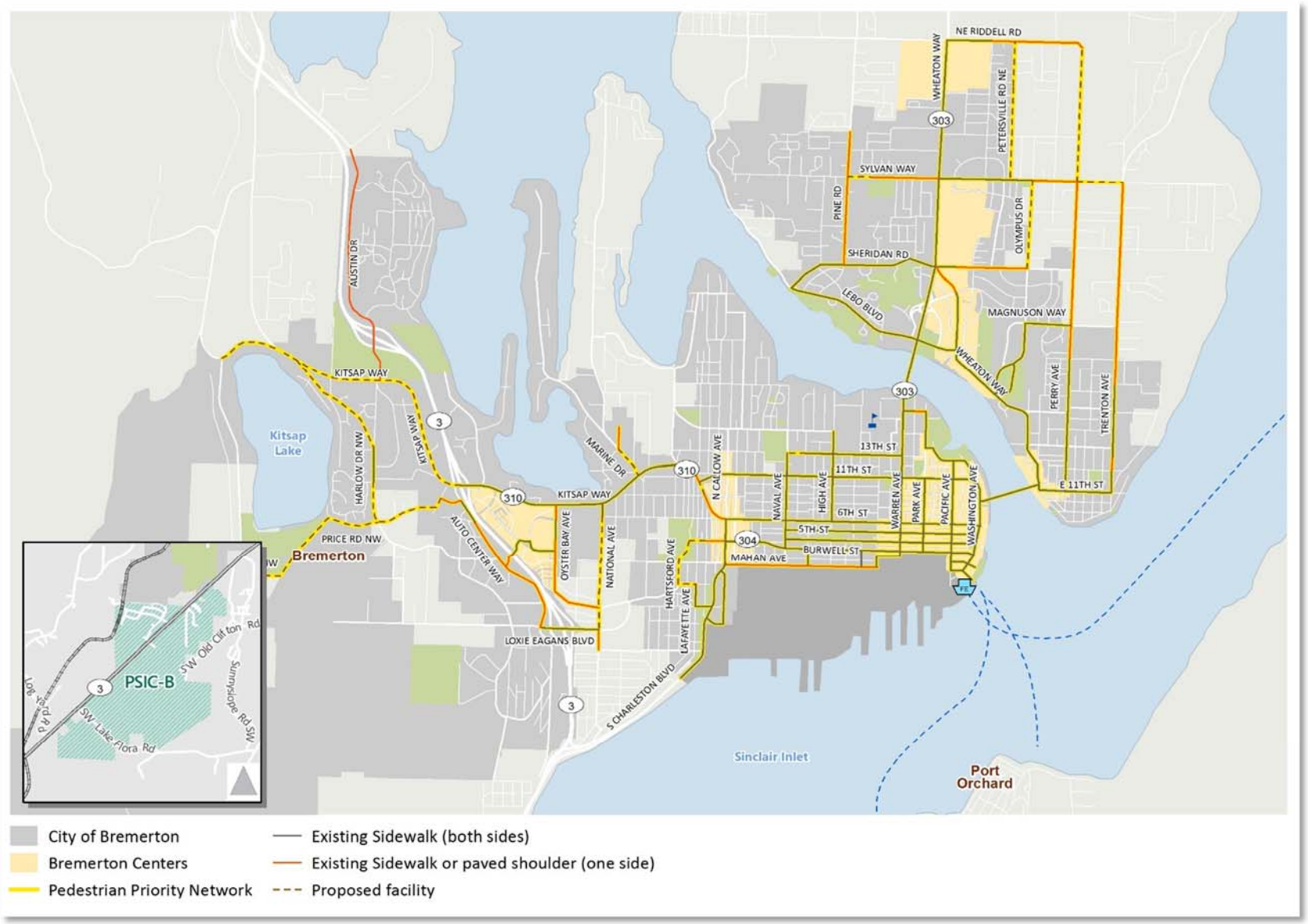


Figure 21: Bicycle Facilities

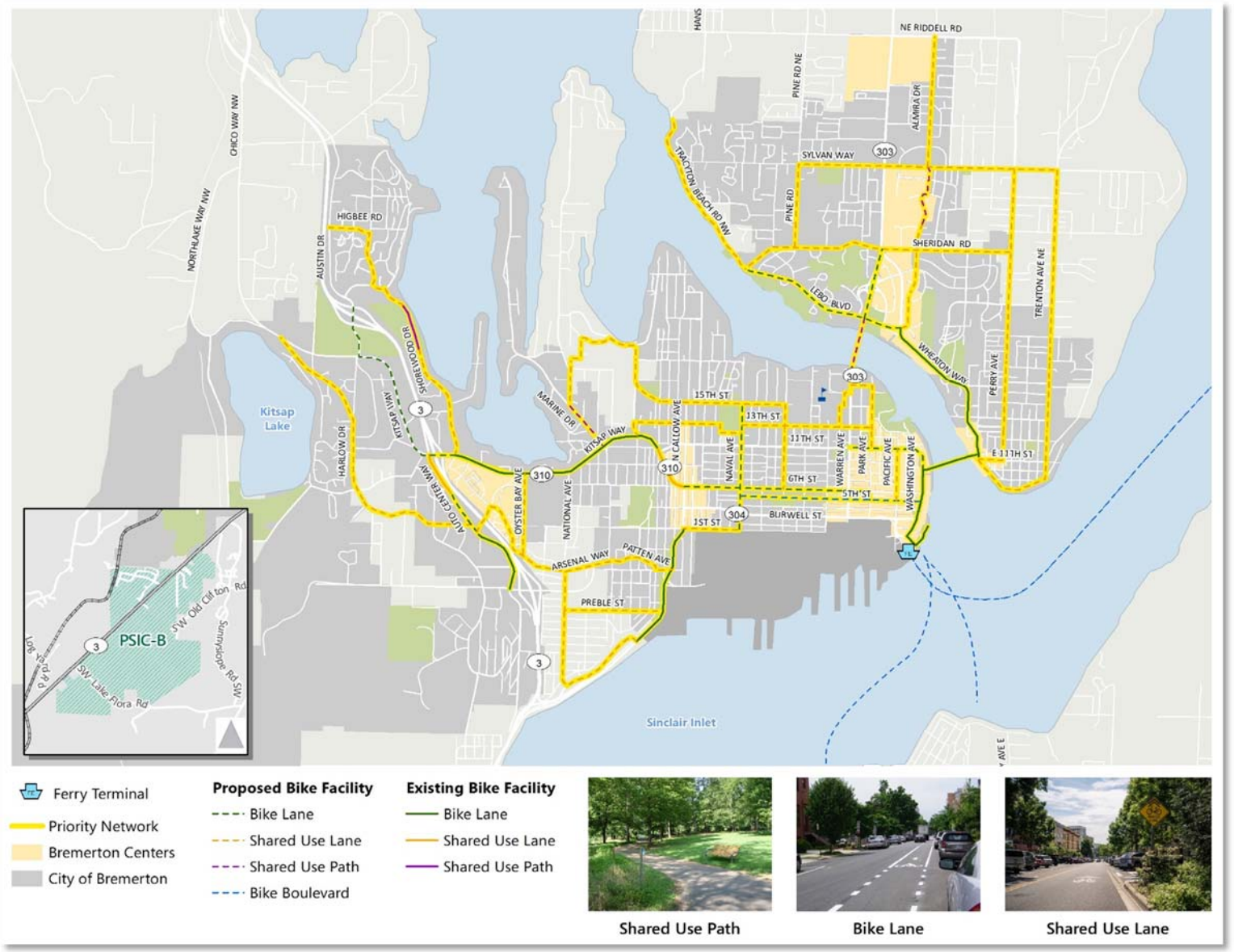
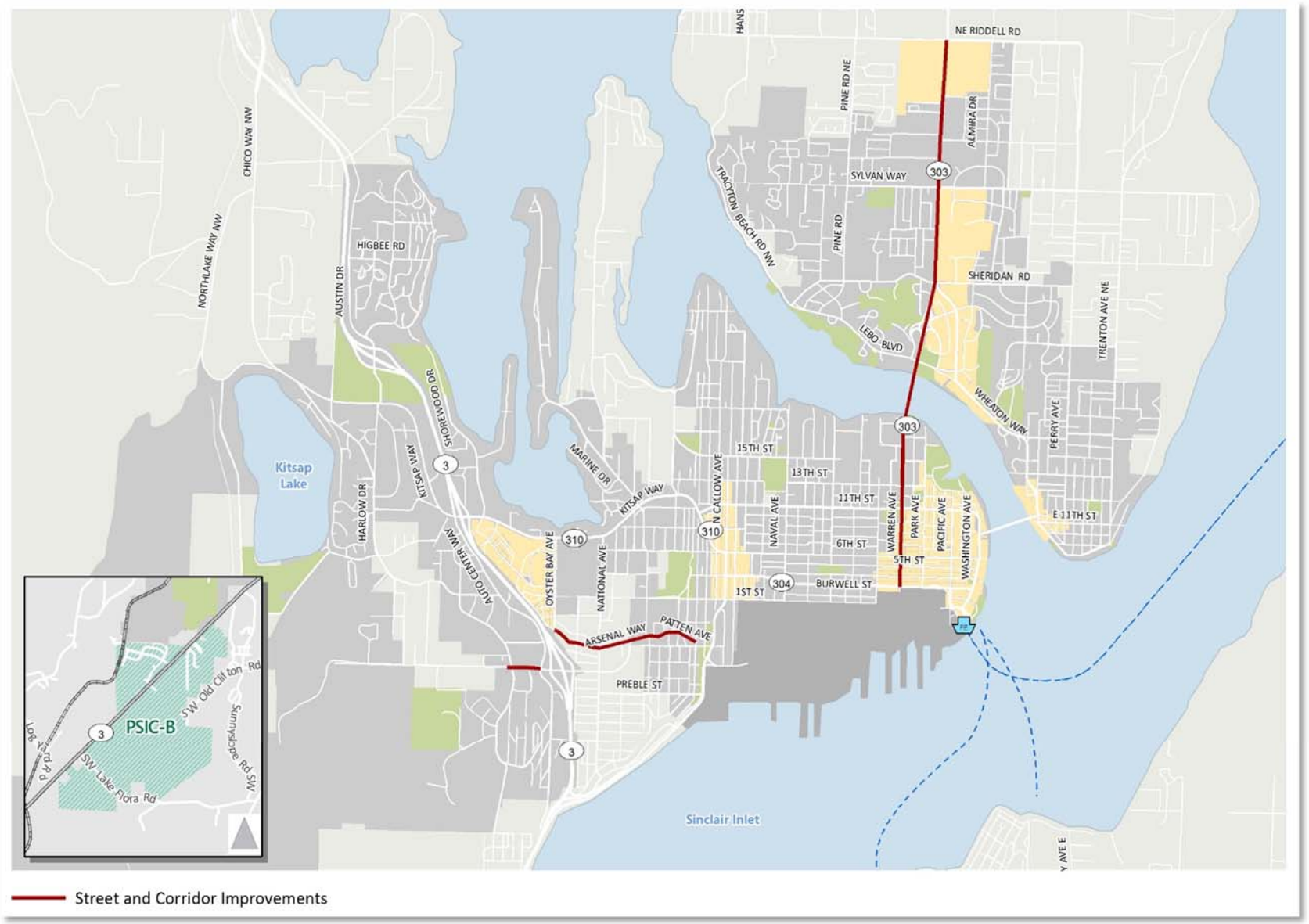


Figure 22: Twenty Year Auto Project List



The recommended projects and programs of the Transportation Appendix were developed by travel mode, as described in previous sections. Implementing the Transportation Plan will require close coordination among the City departments, citizens, businesses, and other agencies within the region.

To guide the City's implementation of the Transportation Plan, priority should be assigned to assist in assembling an updated six-year Capital Improvement Program (CIP), working toward the 2036 planning horizon. This section summarizes the recommended plan.

The Transportation Plan is a living document and serves as the blueprint for transportation in Bremerton over the next several years. Realistically, the plan is most useful over the next five years, at which point it should be updated. Several implementation steps should be initiated over the next couple of years to determine if changes are needed, or to reaffirm a particular strategy.

Overview of Costs and Revenues

A key Growth Management Act (GMA) planning requirement is the concept of fiscal restraint in transportation planning. A fiscally constrained Transportation Plan must first allow for operation and maintenance of existing facilities, and then capital improvements. To introduce fiscal constraint into the plan, an inventory of revenues and costs was undertaken to identify funds that are likely to be available for capital construction and operations.

The proposed Transportation Plan for the City of Bremerton contains **$488 million** worth in transportation investments over the next 20 years (refer to **Table 8**). The Transportation Plan focuses on capital projects that will complete the layered network plan, as well as ongoing maintenance to ensure that the roadway network is kept in good condition. **Table 9** summarizes how this overall investment would be broken down by transportation improvement category.

Table 9: Costs of Bremerton Transportation Plan (20+years)

Project Needs	Description	Total Cost
Auto/Freight Priority Projects	Traffic signals, intersection channelization, roadway extensions	$34,896,000
Pedestrian Projects	Sidewalks, crossings	$46,260,504
Bicycle Projects	Bike boulevards, bike lanes, trails	$20,796,117
Transit Projects	Bus rapid transit project	$1,000,000
PSIC-Bremerton Projects	PSIC-Bremerton 20+year projects	$205,765,000
Maintenance and Operations	Roadway maintenance and operations	$179,350,000
	Total	**$488,067,621**

*Costs denoted in present year dollars

The City of Bremerton has spent around $5 million annually for transportation capital, maintenance, and operations. Revenues include those from outside sources and grants, general city funds, and gas tax receipts. It is important to note that much of the funding that has been available historically was generated from grants. Further, transportation funding has failed to meet the City's needs, especially in regards to operation and maintenance.

If the city were able to maintain this level of revenue, the City could afford around $43 million in capital projects, and $60 million on operation and maintenance over the next 20 years[8]. This amount is less than the City's anticipated need.

The comparison of revenues to costs indicates that the city will need to carefully prioritize its projects, because not all of the transportation needs are likely to be affordable with existing revenue sources during the 20-year period. If this occurs, the City has several options:

- Increase the amount of revenue from existing sources, including parking fees, transportation benefit district, or increased general fund revenues.
- Adopt new sources of revenue (see text box below).
- Lower the level of service standard, and therefore reduce the need for some transportation improvements.

Note that the city could also weigh changing the land use element to reduce the amount of development planned (and thus reduce the need for additional public facilities). However, in a community such as Bremerton, that serves travelers from unincorporated Kitsap County, land use changes would not likely result in a substantially reduced facility needs.

PSIC-Bremerton

The proposed 20 year project list for the PSIC-Bremerton Subarea Plan[9] contains **$206 million** worth in transportation investments over the next 20 years (refer to **Table 8)**.

There are many sources of funds that can be used for PSIC-Bremerton transportation projects. Typically, two parties will pay for the needed transportation facilities: the government, and/or the developer/owner of the property. Government funding sources may include: real estate excise taxes, motor vehicle license fees, property taxes, grants, and other sources of funding. Developers will be responsible for SEPA mitigation fees, as outlined in PSIC-Bremerton Planned Action Ordinance 5189.

As outlined in PSIC-Bremerton Subarea Plan (formerly known as the SKIA Subarea Plan) the financing plan for transportation projects is based on the following assumptions:

- Grants will be sought and used to pay for as much of the project costs as possible.
- PSIC developers/property owners are responsible for funding the portion of local roads that are not funded by grants.

[8] Based on the average funding for capital and operation and maintenance over the past five years (in present year dollars).

[9] Formerly the SKIA Subarea Plan

- The state is responsible for the cost of state road projects other than local matching requirements.
- The local share of state road projects depends on the matching requirement of specific grants. Recent experience ranges from 1 to 2 percent.

Table 11 outlines the PSIC-Bremerton projects by category and what parties are expected to contribute to projects' funding.

Table 10: PSIC- Bremerton Projects (20+years)

Project Needs	Description	Total Cost	Who Pays		
			Developers	City	State
Local Access and Collector Roadway Projects	New roadways and roadway extensions	$24,465,000	✓	✓	
Non-motorized Projects	Sidewalks and trails	$1,300,000	✓	✓	
State Highway Projects	Traffic signals, intersection channelization, roadway extensions	$180,000,000	✓	✓	✓
Belfair Byway Project	2-Lane dived highway	Funded			✓
	Total	**$205,765,000**			

*Costs denoted in present year dollars

WHAT ARE POTENTIAL NEW REVENUE SOURCES?

- Proceeds from General Obligation Bonds
- Creation of Local Improvement Districts
- Mitigation fees for pedestrian and bicycle facilities
- Reciprocal impact fees with adjacent jurisdictions
- Property tax levy lid lift for transportation
- Business license fee per employee
- Traffic impact fees
- Vehicle Tab Fees
- State law changes related to transportation funding
- Federal payments in lieu of taxes

The city can explore the feasibility and likely revenue amounts from these or other sources, as the plan is implemented over the next several years.

Setting Priorities

Project prioritization is needed to help identify when best to fund and implement the projects since funding is limited. Criteria were established to help prioritize the projects and implementation. These criteria are not listed in any priority order and identified in the following text box.

Using these criteria, the recommended projects will need to be evaluated and ranked based on how well each could meet the criteria. Because one of the criteria relates to funding availability, priorities may shift over time as fund sources change.

High priority projects for Bremerton are those that meet multiple criteria in terms of effectiveness, benefit to the community, and ability to be implemented. These attributes will allow the City to take advantage of a variety of public and private funding sources to complete key projects.

Monitoring and Evaluation

The Transportation Plan is a long-range plan that enables the City to plan for its current and future transportation needs. Nonetheless, the transportation network is dynamic, constantly changing due to circumstances beyond the scope and influence of this plan. Hence, regular updates are necessary to ensure the plan remains current and relevant. The Transportation Plan includes the following actions to monitor and evaluate the progress of implementing the plan.

CRITERIA FOR PROJECT PRIORITIZATION

- Meets City's transportation goals:
  - T1: Promote and develop transportation systems that stimulate, support, and enhance the movement of people and goods to ensure a prosperous economy
  - T2: Acknowledge the existing built environment and maintain, preserve, and extend the life and utility of prior investments in transportation systems and services.
  - T3: Provide for and improve the safety and security of transportation users and the transportation system.
  - T4: Enhance Bremerton's quality of life through transportation investments that promote energy conservation, healthy communities, aesthetics and protect the environment.
  - T5: Continuously improve the quality, effectiveness, and efficiency of the transportation system.
- Maintains/improves safety of traveling in Bremerton
- Provides tangible benefits to Bremerton residents
- Leverages non-city (federal, state, private) funds freeing up city revenues for additional projects

Bi-Annual Mobility Report Card

A bi-annual mobility report card will be developed to document progress towards plan implementation and to monitor the transportation system performance. The City will use this information to inform the public regarding the City's actions, and results, related to the Transportation Plan. The report card will also provide a basis for future updates of the Transportation Plan.

The report card is expected to report on the following topics:

- **Land Use and Transportation Trends –** These data will describe general land use and transportation trends within Bremerton. Information will include:
    - Current population and employment levels and growth rates,
    - Summary of yearly development activity, and
    - Summary of growth in traffic volumes, transit service and other trends
- **Transportation Performance** – These data will focus on documenting the current performance of the transportation system, by mode. Information will include:
    - Transit route ridership (from Kitsap Transit, Mason Transit, and Washington State Ferries)
    - Park-and-ride lot utilization
    - On-street parking utilization in downtown and nearby park-and-ride locations
    - Traffic volumes
    - Collisions
    - Traffic level of service (auto/truck priority corridors)
    - Pedestrian and bicycle volumes
    - Pavement Maintenance Ratings
- **Project Implementation Status** – These data will summarize the city's progress towards implementing the priority network improvements recommended in the Transportation Plan. Information is expected to include:
    - Auto/truck facilities constructed
    - Pedestrian facilities constructed
    - Bicycle facilities constructed
    - Transit stop improvements implemented
    - Miles of Pavement overlays

The report card will provide the necessary information to help the city adjust transportation priorities and to facilitate updates to the Transportation Plan every few years.